clarion

Clarion Co., Ltd.
5-35-2, Hakusan, Bunkyouku, Tokyo, 112-8608 Japan
Service Dept. - 50 kamitoda,Toda-shi,Saitama,335-8511 Japan Tel: 048-443-1111 FAX:048-433-6996

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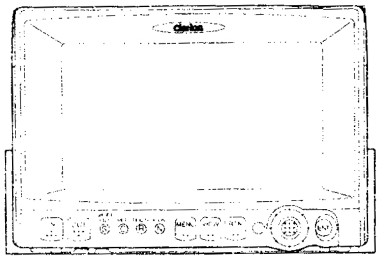
Service Manual



DIN-Size Navigation System Built-in Monitor

Model NVS613
(QX-4010E)

SPECIFICATION

Main section
Rated voltage: DC14.0V(10.8~15.6V)
Negative ground
Current consumption: 2A Max.
Fuse capacity: backup 5 A
External dimensions: 178(W)×50(H)×195(D)(mm)
Weight: 2.0kg

Navigation section
Reception frequencies: 1575.42 MHz C/A codes
Sensitivity: −130dBm
Channels: 8 parallel channels
Voice synthesis: 4-bit ADPCM
sampling frequency 11.025kHz
Speaker output: 0.8W min.
(Maximum output for 8Ω load)

Monitor section
Screen size(mm): 5.8-inch wide
127.2(W)x71.8(H)
Display method: Transmission type TN LCD
Drive method: TFT active matrix driving
Pixels: 280,800pixels(1,200Hx234V)

GPS antenna
Type: Micro strip planar antenna
External dimensions: 34(W)×13(H)×38(D)(mm)
Weight: 95g(including cord)

※ Specifications and design are subject to change without notice for further improvement.

COMPONENTS

QX-4010E-A

Navigation unit	—————	1
Extension lead	854-6370-05	1
Fuse(5A)	120-0050-00	1
GPS antenna	096-0139-00	1
Parts bag	—————	1
Electro tap	060-0018-00	2
Electro tap	060-0305-00	1
Clamp	321-1026-00	8
Waterproof rubber	345-7473-00	1
Double sided tape	347-6369-00	1
Flat head bolt	714-5006-41	4
Double sems bolt(M5x8)	716-0496-01	4

NOTE

※ We cannot supply PWB with component parts in principle. When a circuit on PWB has failure , please repair it by component parts base. Parts which are not mentioned in service manual are not supplied.

※ Prevent damage caused by static electricity when repairing the pick-up.
The pattern of the pick-up is short-circuiting for prevention.
Remove the soldering with a solder iron whose insulation resistance is larger than 10MΩ(DC500V) after complete connection to the main PWB
For repair table shall use copper or conductive sheet (with impedance is lower than 1GΩ)such as a sheet.
Be sure to put on a wrist-strap for prevent electric static's.(with impedance lower than 100MΩ) The strap works to drain away the static electricity build-up on the human body.
And as static electricity build-up on clothes is not drained away, be careful and not your clothes to touch the pick-up.
Position of short soldering for pick-up protection position is different by model.
Some units have two short soldering points.
Always short LD circuit to open the short circuit and removes by soldering iron.

To engineers in charge of repair or inspection of our products.

Before repair or inspection, make sure to follow the instructions so that customers and Engineers in charge of repair or inspection can avoid suffering any risk or injury.

1. Use specified parts.
   The system uses parts with special safety features against fire and voltage. Use only parts with equivalent characteristics when replacing them.
   The use of unspecified parts shall be regarded as remodeling for which we shall not be liable. The onus of product liability (PL) shall not be our responsibility in cases where an accident or failure is as a result of unspecified parts being used.
2. Place the parts and wiring back in their original positions after replacement or re-wiring.
   For proper circuit construction, use of insulation tubes, bonding, gaps to PWB, etc, is involved. The wiring connection and routing to the PWB are specially planned using clamps to keep away from heated and high voltage parts. Ensure that they are placed back in their original positions after repair or inspection.
   If extended damage is caused due to negligence during repair, the legal responsibility shall be with the repairing company.
3. Check for safety after repair.
   Check that the screws, parts and wires are put back securely in their original position after repair. Ensure for safety reasons there is no possibility of secondary ploblems around the repaired spots.
   If extended damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.
4. Caution in removal and making wiring connection to the parts for the automobile.
   Disconnect the battery terminal after turning the ignition key off. If wrong wiring connections are made with the battery connected, a short circuit and/or fire may occur.
   If extensive damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.
5. Cautions regarding chips.
   Do not reuse removed chips even when no abnormality is observed in their appearance. Always replace them with new ones. (The chip parts include resistors, capacitors, diodes, transistors, etc). The negative pole of tantalum capacitors is highly susceptible to heat, so use special care when replacing them and check the operation afterwards.
6. Cautions in handling flexible PWB
   Before working with a soldering iron, make sure that the iron tip temperature is around 270℃. Take care not to apply the iron tip repeatedly(more than three times)to the same patterns. Also take care not to apply the tip with force.
7. Turn the unit OFF during disassembly and parts replacement. Recheck all work before you apply power to the unit.
8. Cautions in checking that the optical pickup lights up.
   The laser is focused on the disc reflection surface through the lens of the optical pickup. When checking that the laser optical diode lights up, keep your eyes more than 30cms away from the lens. Prolonged viewing of the laser within 30cms may damage your eyesight.
9. Cautions in handling the optical pickup
   The laser diode of the optical pickup can be damaged by electrostatic charge caused by your clothes and body. Make sure to avoid electrostatic charges on your clothes or body, or discharge static electricity before handling the optical pickup.

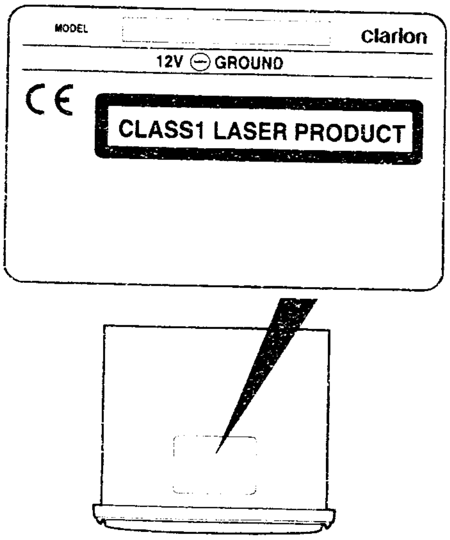
9-1. Laser diode
The laser diode terminals are shorted for transportation in order to prevent electrostatic damage. After replacement, open the shorted circuit. When removing the pickup from the mechanism, short the terminals by soldering them to prevent this damage.

9-2. Actuator
The actuator has a powerful magnetic circuit. If a magnetic material is put close to it. Its characteristics will change. Ensure that no foreign substances enter through the ventilation slots in the cover.

9-3. Cleaning the lens
Dust on the optical lens affects performance. To clean the lens, apply a small amount of isopropyl alcohol to lens paper and wipe the lens gently.

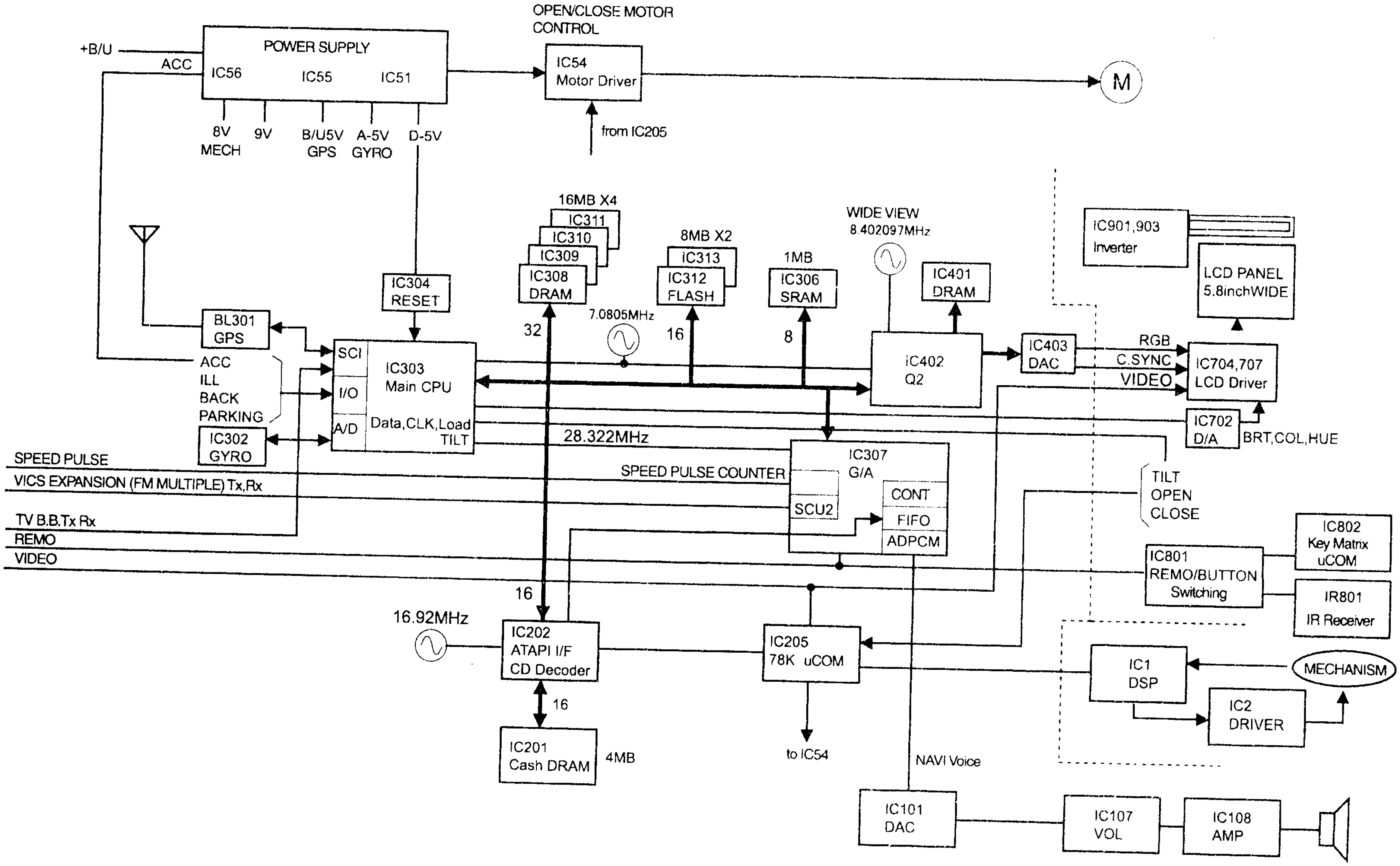
CAUTIONS

This appliance contains a laser system and is classified as a "CLASS 1 LASER PRODUCT". To use this model properly, read this Owner's Manual carefully and keep this manual for your future reference. In case of any trouble with this player, please contact your nearest "AUTHORIZED service station". To prevent direct exposure to the laser beam, do not to open the enclosure.



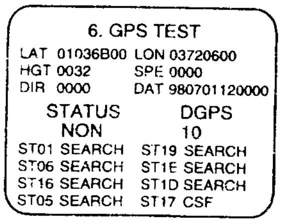
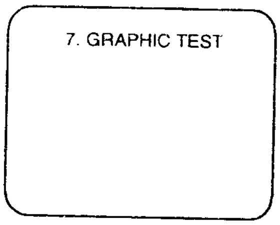
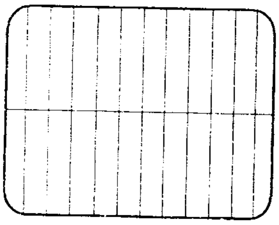
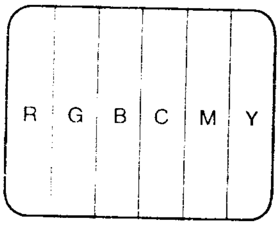
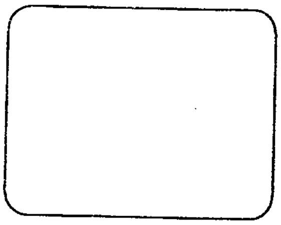
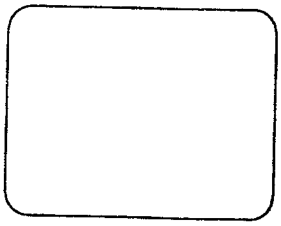
Top view of NAVI-UNIT

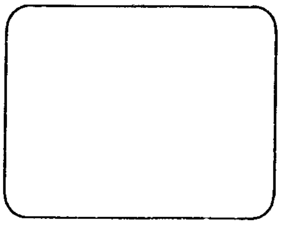
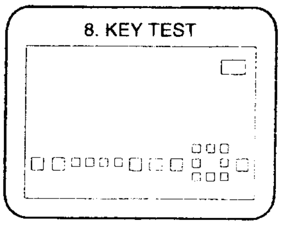
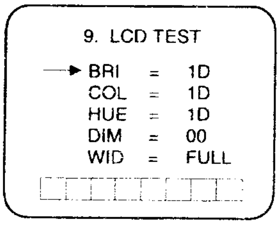
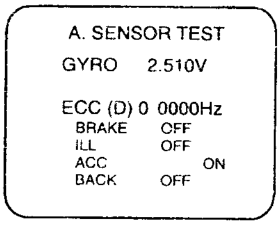
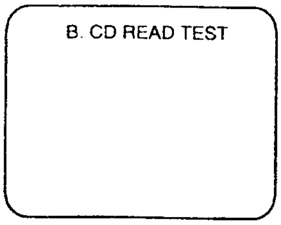
■BLOCK DIAGRAM


OPEN/CLOSE MOTOR CONTROL
+B/U
ACC
POWER SUPPLY
IC56
IC55
IC51
8V MECH
9V
B/U5V GPS
A-5V GYRO
D-5V
IC54 Motor Driver
from IC205
M
16MB X4
IC311
IC310
IC309
IC308 DRAM
8MB X2
IC313
IC312 FLASH
1MB
IC306 SRAM
WIDE VIEW
8.402097MHz
IC401 DRAM
IC901,903 Inverter
LCD PANEL 5.8inchWIDE
IC304 RESET
BL301 GPS
ACC
ILL
BACK
PARKING
IC302 GYRO
SCI
I/O
A/D
IC303 Main CPU
Data,CLK,Load
TILT
32
7.0805MHz
16
8
28.322MHz
IC402 Q2
IC403 DAC
RGB
C.SYNC
VIDEO
IC704,707 LCD Driver
IC702 D/A
BRT,COL,HUE
SPEED PULSE
VICS EXPANSION (FM MULTIPLE) Tx,Rx
TV B.B.Tx Rx
REMO
VIDEO
SPEED PULSE COUNTER
IC307 G/A
SCU2
CONT
FIFO
ADPCM
TILT
OPEN
CLOSE
IC802 Key Matrix uCOM
IC801 REMO/BUTTON Switching
IR801 IR Receiver
16
16.92MHz
IC202 ATAPI I/F CD Decoder
16
IC201 Cash DRAM
4MB
IC205 78K uCOM
to IC54
NAVI Voice
IC1 DSP
MECHANISM
IC2 DRIVER
IC101 DAC
IC107 VOL
IC108 AMP

■SELF-DIAGNOSTIC FUNCTION

Item	Screen Display	Operation	Remarks
Start-up		Connect pins No.3 and No.8 in Extension Terminal No.1 with a lead wire or something similar, and turn on power.	
Menu	TEST MODE 1. GPS INITIAL 2. MEMORY TEST 3. CD TEST 4. SOUND TEST 5. SERIAL TEST 6. GPS TEST 7. GRAPHIC TEST 8. KEY TEST 9. LCD TEST A. SENSOR TEST B. CD READ TEST	Use the Menu and Return keys to select a test item from the menu. Menu key: Move down the list Return key: Move up the list When the desired item has been selected, press the Current position key to display the relevant test information or values.	
GPS Settings	1. GPS INITIAL SET LAT 3722 SET LON 14023 SET DATA 98070112 PUSH OK	Moving the joystick left and right will move the red bar; the current date and time can be changed by moving it up and down. The Current position key can be pressed to allow latitude and longitude values to be adjusted in the same way.	LAT: Latitude LON: Longitude DATA: Year/Month/Day/Time(hour) (Two digit value for each)
Memory Test	2. MEMORY TEST ROM 4E3B SRAM OK DRAM OK VRAM OK FLASH OK CSTM FLASH/SRAM CLR	Press the Current position key to perform an automatic check of ROM, SRAM, DRAM, VRAM, and FLASH memory in that order. (A certain amount of time is required for the DRAM test.) ※ When memory is to be erased, press the RPT+ key several times to change CSTM to NOW on the screen. The erase will have been performed successfully when the display disappears.	Although "NG" will be displayed whenever an error has been identified, any display for ROM other than "4E3B" is considered as being erroneous. Caution: The power must not be turned off while the Memory Test is being performed. Caution: When memory is erased, all information such as record lists will be cleared.
CD Test	3. CD TEST CD READ1 → NVG CD AUDIO → ↓ CD READ2 → ▲ CD CHECK → ENT (DONT CONNECT MECHA)	Press Current position key.	"CD CHECK" will show "READ OK" Caution: The Execute key must not be pressed when in the CD Test screen.
Sound Test	4. SOUND TEST S MUTE	Use the Current position key to modify the sound volume. The Execute key activates the Mute function.	↓ S (Low volume) ↓ M (Medium volume) ↓ L (Hight volume)
Serial Test	5. SERIAL TEST RETURN CHK GPS – EXT1 OK TV NG EXT1 DTR H TV REQ L	Successive pressing of the Current position key changes EXT1,DTR, and TV REQ to "H" in that order. GPS: Not tested EXT1: Display shows "OK" when pins No.6 and No.7 on the J501 connector are connected. TV: Display shows "OK" when pins No.4 and No.5 on the J502 connector are connected.	Checks are each of the serial data-transfer lines. Use the Jig to check of EXT1,DTR TV REQ.

Item	Screen Display	Operation	Remarks
GPS Test	 6. GPS TEST LAT 01036B00 LON 03720600 HGT 0032 SPE 0000 DIR 0000 DAT 980701120000 STATUS DGPS NON 10 ST01 SEARCH ST19 SEARCH ST06 SEARCH ST1E SEARCH ST16 SEARCH ST1D SEARCH ST05 SEARCH ST17 CSF		The GPS receiving condition is displayed. LAT: Latitude LON: Longitude HGT: Height SPE: Speed DIR: Direction DAT: Date STATUS (reception condition) NON: Not positioning SRH: Positioning 2D: 2D positioning 3D: 3D positioning DGPS 10: Non-DGPS positioning 11: DGPS positioning ↓ ST1 to ST8 (Satellite Data) SEARCH:Searching RCV: Receiving AVL: Available for positioning USE: Using for positioning CSF: CSF
Graphic Test	 7. GRAPHIC TEST	Use the Current position key to display the five individual Graphic Test screens.	
			The display changes from white to black in 17 individual steps.
			The colors white, red, green, blue, Cyan, Magenta and yellow are displayed.
			Full black screen.
			Full white screen.

Item	Screen Display	Operation	Remarks
			This screen is for a reserve.
key Test.	 8. KEY TEST	The position is painted on the screen, when each operation key is pushed.	
LCD Test	 9. LCD TEST → BRI = 1D COL = 1D HUE = 1D DIM = 00 WID = FULL	Moving the Joystick up and down will select the item and setting can be changed by moving it right and left. BRI/COL/HUE can change to 3 stages by the Zoom key. When the RPT+ key is pushed setting can be returned to initial.	BRI: Brightness COL: Color HUE: Hue DIM: Dimer WID: Wide FULL ← ↓ SINM ↓ NORM ↓ WID1
Sensor Test	 A. SENSOR TEST GYRO 2.510V ECC (D) 0 0000Hz BRAKE OFF ILL OFF ACC ON BACK OFF		GYRO When the vehicle is stationary, a value in the region of 2.500 V will be displayed. This value will move up or down whenever the direction of the navigator unit is changed. ※ When the value changes, the color of the figures will also change as follows: Up to 2.0 V: Blue From 2.0 V to 3.0 V: White ECC(D) or ECC(A) When a pulse is being sent to the speed sensor, its value is displayed here. BRAKE This will read "ON" when the parking brake is dropped to GND. ILL This will read "ON" when 12 V is being supplied to the illumination. ACC This will read "OFF" when Accessory is turned off. Power will turn off approximately a few seconds later. BACK This will read "ON" when 12 V is being supplied to Back.
CD read test	 B. CD READ TEST	Playback of the MUSIC CD checked by Current position key.	

■ERROR MESSAGES

Symptom	Cause	Solution
CD-ROM disc error	The disc is scratched, dirty or loaded upside down.	Take out the CD-ROM,check it, and insert it correctly.
	CD-ROM function error The display map data could not be read.	Alternatively, turn the vehicle ignition key to OFF, wait about 5 seconds, then restart the engine.
The memory was erased. Restart the engine.	Map, destination, point registration,route, or track data could not be read.	Alternatively, turn the vehicle ignition key to OFF, wait about 5 seconds, then restart the engine. In this case, the data may be erased.

■ADJUSTMENT

※ Refer to the adjustment point on page21(LCD PWB).

LCD Power supply section

1. DC-DC Converter section Voltage adjustment.

1-1Adjust TP701 to 5.3±0.02V by VR701.

1-2Confirm TP702 = 7.5±0.5V.

1-3Confirm TP703 = 13.0±0.5V.

1-4Confirm TP704 = -16.0±0.5V.

LCD Controller section

1. PLL Adjustment

1-1Short TP716 to GND and check TP714 within 2.65±0.1V.

1-2On the above condition, adjust TP717 to 15.734KHz± 50Hz by VR708.

2. Screen position adjustment

2-1Input NTSC standard video signals and adjust the pulse width of TP717 (HSY) to 4.6±0.1 μ sec by VR709(HPOS).

3. Controller voltage confirmation (Connector J702)

3-1VGH(32P) = 13.0±0.5V

3-2VCC(31P) = −11.0±0.5V

3-3VGL(25P) = −10.2±0.5V

(Confirm COM signal 7.86kHz)

3-4VSH(11P) = 5.3±0.2V

Video section

1. Video signal adjustment

Input linear(10 steps),monochrome,APL50% Wave-like(1.0Vp-p) (NTSC standard signal) to VIDEO INPUT. (Set D/A to initial position,RGBON=0V)

1-1BRT Voltage confirmation

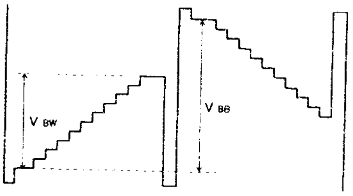
Confirm TP710 = 2.00±0.10V.

1-2 γ0(GAM0) Voltage confirmation

Confirm TP708 = 1.95±0.

1-3 γ2(GAM2) Voltage confirmation

Confirm TP709 = 2.15±0.10V.



1-4Mnonitor TP706(VG) with a synchroscope and adjust VBB to 4.0±0.05V by VR706(RGB AMP),VBW to 3.8± 0.05V with VR702 (CONT).

1-5Monitor TP705(VR) with a synchroscope and adjust VBB to 4.0±0.05V by VR704(BRT R).

1-6Monitor TP707(VB) with a synchroscope and adjust VBB to 4.0±0.05V by VR705(BRT B).

1-7Monitor TP713 (VCOMAC) with a synchroscope and adjust amplitude to 8.0±0.1Vp-p by VR703(COM AMP).

RGB section(Connector J701)

1. RGB Screen confirmation

1-1Set RGBON='H'(5V) and input a signal of 0.7Vp-p to R, G, B, CSYNC terminal and confirm if each R, G, B is shown.

Inverter section

1. Fluorescence Display power supply confirmation

1-1Set FL-on='H' and confirm if the output to FL+B(J702) is 13.2V.

1-2Confirm if FLDIM(J702) become 0V or Confirm if the back light goes dim at the night mode. (setting by D/A)

PANEL ASSY section

1. VCOM DC bias adjustment

Adjust VR707(VCOM DC) to the best contrast position.(using an Illuminanometer)

■EXPLANATION OF IC

052-3518-00 MBM29F800BA-70PN Flash Memory

1.Terminal Description

pin 1:	A 13	:IN: The address input.
pin 2:	A 14	:IN: The address input.
pin 3:	A 15	:IN: The address input.
pin 4:	A 12	:IN: The address input.
pin 5:	A 11	:IN: The address input.
pin 6:	A 10	:IN: The address input.
pin 7:	A 9	:IN: The address input.
pin 8:	A 8	:IN: The address input.
pin 9:	NU	: - : Not in use.
pin 10:	WE_	:IN: Wright enable signal input terminal.
pin 11:	RESET_	:IN: Reset signal input.
pin 12:	VCC	: - : Positive supply voltage.
pin 13:	DQ 4	:I/O: The data input / output.
pin 14:	DQ 12	:I/O: The data input / output.
pin 15:	DQ 5	:I/O: The data input / output.
pin 16:	DQ 13	:I/O: The data input / output.
pin 17:	DQ 6	:I/O: The data input / output.
pin 18:	DQ 14	:I/O: The data input / output.
pin 19:	DQ 7	:I/O: The data input / output.
pin 20:	A 16	:IN: The address input.
pin 21:	BYTE_	:IN: The data length selection(8bit/16bit).
pin 22:	VSS	: - : Negative supply voltage.
pin 23:	DQ 15/A-1	:I/O: The data input/output, The address input.

pin 24: OE_ : IN : Output enable signal input.
pin 25: VSS : - : Negative supply voltage.
pin 26: CE_ : IN : Chip enable signal input.
pin 27: A 0 : IN : The address input.
pin 28: DQ 0 : I/O: The data input / output.
pin 29: DQ 8 : I/O: The data input / output.
pin 30: DQ 1 : I/O: The data input / output.
pin 31: DQ 9 : I/O: The data input / output.
pin 32: DQ 2 : I/O: The data input / output.
pin 33: DQ 10 : I/O: The data input / output.
pin 34: DQ 3 : I/O: The data input / output.
pin 35: DQ 11 : I/O: The data input / output.
pin 36: NU : - : Not in use
pin 37: BY_/RY : O : Ready/Busy
pin 38: A 18 : IN : The address input.
pin 39: A 17 : IN : The address input.
pin 40: A 7 : IN : The address input.
pin 41: A 6 : IN : The address input.
pin 42: A 5 : IN : The address input.
pin 43: A 4 : IN : The address input.
pin 44: A 1 : IN : The address input.
pin 45: A 2 : IN : The address input.
pin 46: A 3 : IN : The address input.

052-3519-10 HD6437043AF49F SH-2 CORE RISC CPU

1.Terminal Description
pin 1: PA 23 : - : Not in use.
pin 2: DA CK 0 : O : Strobe of DMA request to Q2.
pin 3: AUDIO_/BEEP : O : Output selection, "L"= Audio, "H"= Beep.
pin 4: CAS HH_ : O : The column address strobe to the DRAM.
pin 5: DA CK 1 : O : Strobe of DMA request to CD decoder.
pin 6: VSS : - : Negative supply voltage.
pin 7: A 0 : O : The address output to the external DRAM.
pin 8: A 1 : O : The address output.
pin 9: A 2 : O : The address output.
pin 10: A 3 : O : The address output.
pin 11: A 4 : O : The address output.
pin 12: VCC : - : Positive supply voltage.
pin 13: A 5 : O : The address output.
pin 14: VSS : - : Negative supply voltage.
pin 15: A 6 : O : The address output.
pin 16: A 7 : O : The address output to the external DRAM.
pin 17: A 8 : O : The address output.
pin 18: A 9 : O : The address output.
pin 19: A 10 : O : The address output.
pin 20: A 11 : O : The address output.
pin 21: A 12 : O : The address output.
pin 22: A 13 : O : The address output.
pin 23: A 14 : O : The address output.
pin 24: A 15 : O : The address output.
pin 25: A 16 : O : The address output.
pin 26: VCC : - : Positive supply voltage.
pin 27: A 17 : O : The address output.
pin 28: VSS : - : Negative supply voltage.
pin 29: CAS HL_ : O : The column address strobe to the DRAM.
pin 30: P OFF : O : Power off command output.
pin 31: RAS_ : O : The row address strobe output to the DRAM.
pin 32: CAS LL_ : O : The column address strobe to the DRAM.
pin 33: PA 18 : - : Not in use.
pin 34: CAS LH_ : O : The column address strobe to the DRAM.
pin 35: VSS : - : Negative supply voltage.
pin 36: DWR_ : O : Write strobe for the DRAM.
pin 37: A 18 : O : The address output.
pin 38: A 19 : O : The address output.
pin 39: A 20 : O : The address output.
pin 40: VCC : - : Positive supply voltage.
pin 41: A 21 : O : The address output.
pin 42: VSS : - : Negative supply voltage.
pin 43: READ_ : O : Read command output.
pin 44: WDT OVF_ : O : Over flow of WDT.
pin 45: D 31 : I/O: The data input / output.
pin 46: D 30 : I/O: The data input / output.
pin 47: WR LH_ : O : Upper bits selection command output.
pin 48: WR LL_ : O : Lower bits selection command output.
pin 49: CS 1_ : O : Chip selection signal output to the external register and ROM.
pin 50: CS 0_ : O : Not in use.
pin 51: IRQ 3_ : IN : Interrupt request.
pin 52: IRQ 2_ : IN : Interrupt request.
pin 53: CS 3_ : O : Chip selection signal output to the external register and ROM.
pin 54: CS 2_ : O : Chip selection signal output to the external register and ROM.
pin 55: VSS : - : Negative supply voltage.
pin 56: D 29 : I/O: The data input / output.
pin 57: D 28 : I/O: The data input / output.
pin 58: D 27 : I/O: The data input / output.
pin 59: D 26 : I/O: The data input / output.
pin 60: D 25 : I/O: The data input / output.
pin 61: GND : - : Ground.
pin 62: D 24 : I/O: The data input / output.
pin 63: VCC : - : Positive supply voltage.
pin 64: D 23 : I/O: The data input / output.
pin 65: D 22 : I/O: The data input / output.
pin 66: D 21 : I/O: The data input / output.
pin 67: D 20 : I/O: The data input / output.
pin 68: D 19 : I/O: The data input / output.
pin 69: D 18 : I/O: The data input / output.
pin 70: D 17 : I/O: The data input / output.
pin 71: VSS : - : Negative supply voltage.
pin 72: D 16 : I/O: The data input / output.
pin 73: D 15 : I/O: The data input / output.
pin 74: D 14 : I/O: The data input / output.
pin 75: D 13 : I/O: The data input / output.
pin 76: D 12 : I/O: The data input / output.
pin 77: VCC : - : Positive supply voltage.
pin 78: D 11 : I/O: The data input / output.
pin 79: VSS : - : Negative supply voltage.
pin 80: D 10 : I/O: The data input / output.
pin 81: D 9 : I/O: The data input / output.
pin 82: D 8 : I/O: The data input / output.
pin 83: D 7 : I/O: The data input / output.
pin 84: D 6 : I/O: The data input / output.
pin 85: VCC : - : Positive supply voltage.
pin 86: D 5 : I/O: The data input / output.
pin 87: VSS : - : Negative supply voltage.
pin 88: D 4 : I/O: The data input / output.
pin 89: D 3 : I/O: The data input / output.
pin 90: D 2 : I/O: The data input / output.
pin 91: D 1 : I/O: The data input / output.
pin 92: D 0 : I/O: The data input / output.
pin 93: VSS : - : Negative supply voltage.
pin 94: XTAL : - : Not in use.
pin 95: MD 3 : IN : Fix to "H".
pin 96: E XTAL : IN : Crystal connection.
pin 97: MD 2 : IN : Fix to "L".
pin 98: NMI : IN : Not in use.
pin 99: VCC : - : Positive supply voltage.
pin100: PA 16 : IN : Self diagnosis.
pin101: WAIT_ : IN : Wait interrupt.
pin102: MD 1 : IN : Fix to "H".
pin103: MD 0 : IN : Fix to "L".
pin104: PLL VCC : - : PLL power supply.
pin105: PLL CAP : - : Capacitor connection for PLL.
pin106: PLL VSS : - : PLL ground.
pin107: CK : O : Clock pulse.
pin108: RES_ : IN : Reset signal.
pin109: D REQ 0_ : IN : DMA request for Q2.
pin110: PE 1 : O : Fluorescence pipe ON signal output.
pin111: D REQ 1_ : IN : DMA request for CD decoder.
pin112: VCC : - : Positive supply voltage.
pin113: PE 3 : O : Not in use.
pin114: TIOCIA : IN : The data input from the remote controller.

pin115: MUTELINE : O : Not in use.
pin116: MUTE AMP : O : Amplifier Mute signal output.
pin117: VSS : - : Negative supply voltage.
pin118: AN 0 : IN : Gyroscope signal input.
pin119: AN 1 : IN : Not in use.
pin120: KO SLEEP : IN : CD micro computer status flag intput. "H" = Stop.
pin121: BACK_ : IN : Back gear signal input from the car.
pin122: ACC MONI : IN : ACC monitor.
pin123: ILLUMI_ : IN : Illumination ON signal.
pin124: A VSS : - : Analog ground.
pin125: PARKING_ : IN : Parking brake signal input.
pin126: FLASH RY/BY : O : Ready/Busy signal output to the flash memory.
pin127: A Vref : IN : Reference voltage for ADC.
pin128: A VCC : - : Positive supply voltage for the internal analog section.
pin129: VSS : - : Negative supply voltage.
pin130: RX D 0 : IN : GPS serial data input.
pin131: TX D 0 : O : GPS serial data output.
pin132: IRQ 0_ : IN : Interrupt request.
pin133: RX D 1 : IN : Serial data input.
pin134: TX D 1 : O : Serial data output.
pin135: VCC : - : Positive supply voltage.
pin136: IRQ 1_ : IN : Interrupt request.
pin137: VOL 1 : IN : Volume control input. Refer Table 1.
pin138: VOL 2 : IN : Volume control input. Refer Table 1.
pin139: DTR : O : Universal output terminal.
pin140: O SP CNT : O : Not in use.
pin141: VSS : - : Negative supply voltage.
pin142: D Clock : O : BRI,COL,HUE setting signal output for the LCD.
pin143: D Data : O : BRI,COL,HUE setting signal output for the LCD.
pin144: D Load : O : BRI,COL.HUE setting signal output for the LCD.

Table 1. Volume control input

Volume	VOL1(pin137)	VOL2(pin138)
Large	L	L
Midiam	L	H
Small	H	H

052-5030-00 uPD78014GC-A32-AB8 CD Mechanism Controller

1.Terminal Description

pin 1: CHU SW : IN : CD disc chucking signal input.
pin 2: CLOSE SW : IN : LCD panel closed flag = "L".
pin 3: OPEN SW : IN : LCD panel opened flag = "L".
pin 4: NU : - : Not in use.
pin 5: MOT IN 1 : O : LCD panel loading motor control. Refer Table 1.
pin 6: MOT IN 2 : O : LCD panel loading motor control. Refer Table 1.
pin 7: MOT ON : O : LCD panel loading motor ON signal output.
pin 8: ACC MONI : IN : ACC monitor.
pin 9: VSS : - : Negative supply voltage.
pin 10: D 0 :I/O: The data input / output.
pin 11: D 1 :I/O: The data input / output.
pin 12: D 2 :I/O: The data input / output.
pin 13: D 3 :I/O: The data input / output.
pin 14: D 4 :I/O: The data input / output.
pin 15: D 5 :I/O: The data input / output.
pin 16: D 6 :I/O: The data input / output.
pin 17: D 7 :I/O: The data input / output.
pin 18: SU A 0 : O : The address output.
pin 19: SU A 1 : O : The address output.
pin 20: SU A 2 : O : The address output.
pin 21: SU A 3 : O : The address output.
pin 22: SU A 4 : O : The address output.
pin 23: SU A 5 : O : The address output.
pin 24: VSS : - : Negative supply voltage.
pin 25: SU A 6 : O : The address output.
pin 26: NU : - : Not in use.
pin 27: NU : - : Not in use.
pin 28: NU : - : Not in use.
pin 29: NU : - : Not in use.
pin 30: KO SLEEP : IN : Micro computer status flag output. "H" = Stop.
pin 31: READ_ : O : Read command output.
pin 32: WRITE_ : O : Write command output.
pin 33: WAIT_ : IN : Wait interrupt.
pin 34: NU : - : Not in use.
pin 35: RESET_ : IN : Reset signal input.
pin 36: SB SYNC : IN : Sub code sync.
pin 37: Z INT 1 : IN : The interrupt signal input from ATAPI.
pin 38: Z INT : IN : The decode-end interrupt signal input.
pin 39: TILT SW : IN : LCD panel tilt switch input. "L" = Horizontal.
pin 40: VDD : - : Positive supply voltage.
pin 41: X 2 : - : Crystal connection.
pin 42: X 1 : - : Crystal connection.
pin 43: VSS : - : Negative supply voltage.
pin 44: NU : - : Not in use.
pin 45: NU : - : Not in use.
pin 46: VSS : - : Negative supply voltage.
pin 47: NU : - : Not in use.
pin 48: NU : - : Not in use.
pin 49: NU : - : Not in use.
pin 50: NU : - : Not in use.
pin 51: TR B : IN : Photo sensor signal input from the CD mechanism. Without the disk = "L".
pin 52: MUTE : O : Muting signal output.
pin 53: TP : IN : Test terminal.
pin 54: FL ON : O : The fluorescent light of the LCD ON signal output.
pin 55: VDD : - : Positive supply voltage.
pin 56: VSS : - : Negative supply voltage.
pin 57: BUS 0 :I/O: CD IC Data input / output.
pin 58: BUS 1 :I/O: CD IC Data input / output.
pin 59: BUS 2 :I/O: CD IC Data input / output.
pin 60: BUS 3 :I/O: CD IC Data input / output.
pin 61: BUC CLOCK : O : CD IC clock pulse output.
pin 62: CCE : O : Chip enable signal output to CD IC.
pin 63: CD RESET : O : Reset signal output to the CD mechanism controller.
pin 64: TR A : IN : Photo sensor signal input from the CD mechanism.
8cm-Disk = "L", 12cm-Disk = "H".

Table 1. LCD panel loading motor control

	Stop	Close	Open	Brake
MOT IN 1 (pin 5)	L	H	L	H
MOT IN 2 (pin 6)	L	L	H	H

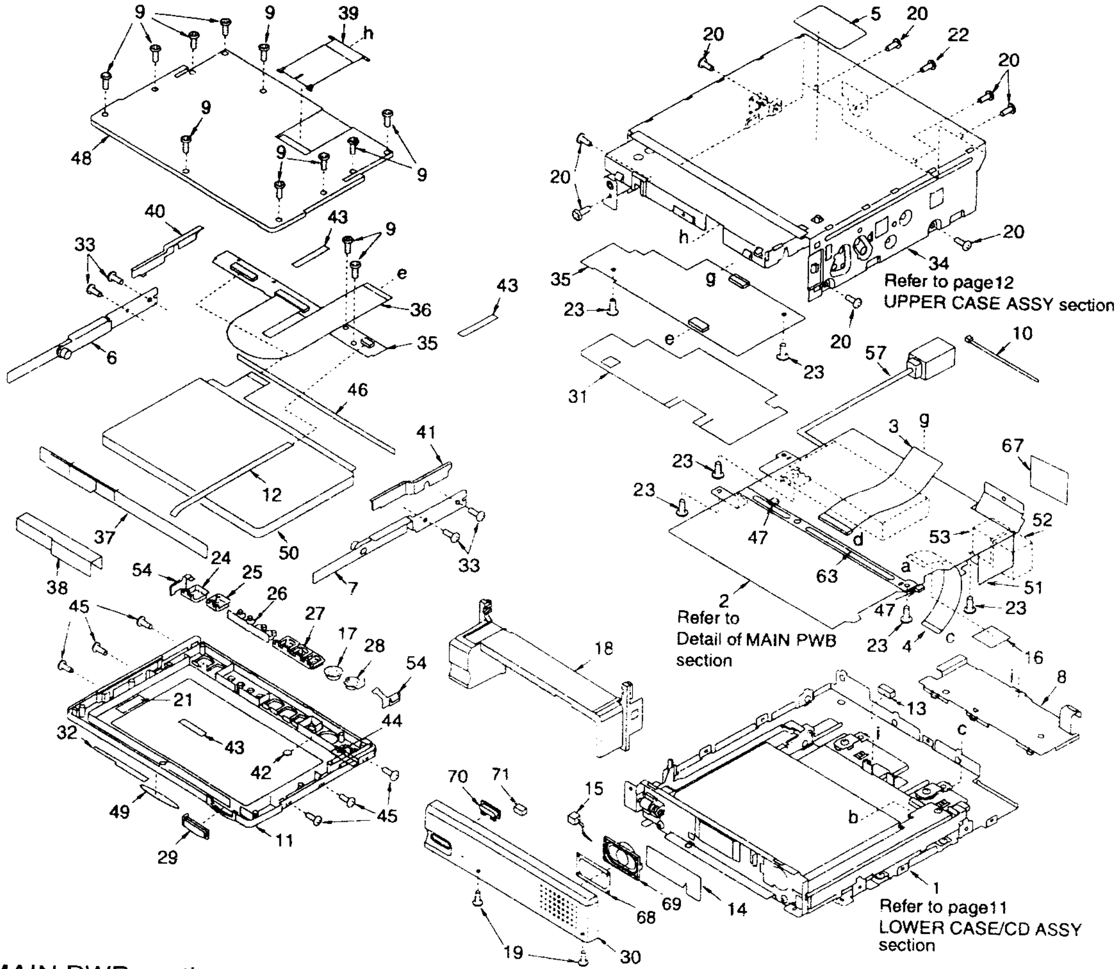
052-7038-08 uPD6604GS-113-GJG-E2 Remote controller

1.Terminal Description

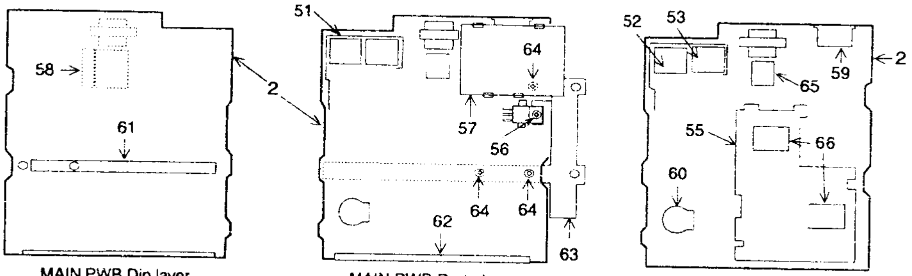
pin 1: KO 6 : O : Not in use.
pin 2: LMP : O : LMP output.
pin 3: SO : O : Not in use.
pin 4: LED_ : O : Remote control signal transmitting flag.
pin 5: REM OUT : O : Remote control signal transmit terminal.
pin 6: VDD : - : Positive supply voltage.
pin 7: X OUT : O : Crystal connection.
pin 8: X IN : IN : Crystal connection.
pin 9: GND : - : Ground.
pin 10: RESET_ : IN : Reset signal input.
pin 11: KI 0 : IN : Key scan signal input.
pin 12: KI 1 : IN : Key scan signal input.
pin 13: KI 2 : IN : Key scan signal input.
pin 14: KI 3 : IN : Key scan signal input.
pin 15: KO 0 : O : Key scan output terminal.
pin 16: KO 1 : O : Key scan output terminal.
pin 17: KO 2 : O : Key scan output terminal.
pin 18: KO 3 : O : Key scan output terminal.
pin 19: KO 4 : O : Not in use.
pin 20: KO 5 : O : Not in use.

■EXPLODED VIEW・PARTSLIST

LCD/Main section


Refer to page12
UPPER CASE ASSY section
Refer to
Detail of MAIN PWB
section
Refer to page11
LOWER CASE/CD ASSY
section

Detail of MAIN PWB section


58
61
2
51
64
57
56
62
64
64
63
52
53
59
2
65
55
66
60

MAIN PWB Dip layer
MAIN PWB Parts layer
MAIN PWB Parts layer

Note) Several different parts of the same reference number are alternative parts.One of those parts is used in the set.

NO.	PART NO.	DESCRIPTION	Q'TY
1	––––––	LOWER CASE/CD ASSY	1
2	039-1714-00	MAIN PWB (WITHOUT COMPONENT)	1
3	039-1310-00	FLEXIBLE PWB(24P)	1
4	039-1311-00	FLEXIBLE PWB(30P)	1
5	286-9838-00	SETPLATE	1
6	948-0504-00	TORQUE BUSH (L)	1
7	948-0505-00	TORQUE BUSH (R)	1
8	331-2510-01	TRAY COVER	1
9	716-0872-11	SCREW	12
10	335-0833-01	LEAD HOLDER	1
11	947-0479-08	DIAL COVER ASSY	1
12	816-2476-00	FLAT WIRE	1
13	345-8269-10	CUSHION	1
14	347-6347-00	PROTECT SHEET	1
15	854-4502-00	EXTENSION LEAD (GRY/BLK)	1

NO.	PART NO.	DESCRIPTION	Q'TY
16	347-5896-00	PROTECT SHEET	1
17	380-5435-20	KNOB(JOY STICK)	1
18	940-7916-02	ESCUTHEON ASSY	1
19	714-2605-47	SCREW(M2.6x5FLAT)	2
20	714-2605-81	SCREW(M2.6x5)	8
21	347-5908-00	ADHESION TAPE	1
22	780-2603-00	P-SCREW(M2.6x3)	1
23	780-2604-00	IT-SCREW(M2.6x4)	6
24	382-5121-01	BUTTON	1
25	382-5122-01	BUTTON	1
26	382-5123-20	BUTTON	1
27	382-5124-01	BUTTON	1
28	382-5125-01	BUTTON	1
29	382-5126-20	BUTTON	[illegible]
30	370-5763-02	ESCUTHEON	[illegible]

NO.	PART NO.	DESCRIPTION	Q'TY
31	347-5891-03	INSULATOR	1
32	347-6349-00	INSULATOR	1
33	781-2635-00	SP-PR-SCREW	4
34	948-0511-20	UPPER CASE ASSY	1
35	039-1735-00	LCD-PWB (WITHOUT COMPONENT)	1
36	039-1309-10	FLEXIBLE PWB	1
37	039-1736-00	INVERTER PWB (WITHOUT COMPONENT)	1
38	347-6348-00	INSULATOR	1
39	335-5802-01	FPC-COVER	1
40	335-5858-00	ARM COVER (L)	1
41	335-5859-00	ARM COVER (R)	1
42	335-6000-00	SENSOR COVER	1
43	347-5880-00	SHIELD HSEET	3
44	347-5924-00	INSULATOR	1
45	714-2003-47	SCREW(M2x3)	6
46	347-5890-00	ADHESION TAPE	1
47	345-8317-00	RUBBER PART	2
48	377-2612-04	DIAL SUPPORT	1
49	378-0519-20	BADGE	1
50	379-0455-20	LCD-INDICATOR	1

NO.	PART NO.	DESCRIPTION	Q'TY
51	331-2935-00	PRESSED PARTS	1
52	074-1213-01	OUTLET SOCKET(13P/TV)	1
53	074-1170-00	OUTLET SOCKET(10P/EXT)	1
54	331-2745-00	PLATE SPRING	2
55	313-1754-01	HEAT SINK	1
56	714-3006-81	SCREW(M3x6)	1
57	880-5006A	GPS-RECEIVER	1
58	345-8272-00	RUBBER PART	1
59	074-1174-01	OUTLET SOCKET(10P)	1
60	088-0034-11	BATTERY(CR2032)	1
61	347-5875-01	INSULATOR	1
62	347-6352-00	SHIELD SHEET	1
63	331-2505-10	PWB-HOLDER	1
64	780-2603-00	IT-SCREW(M2.6x3)	3
65	948-0447-00 948-0561-00	GYROCOMPASS	1
66	345-8508-00	RUBBER PART	2
67	347-6614-00	SHADE	1
68	345-8251-00	SP-CUSHION	1
69	090-0346-00	SPEAKER	1
70	382-5120-10	BUTTON	1
71	345-8230-00	CUSHION	1

■ Break up method

Refer to the following exploded view

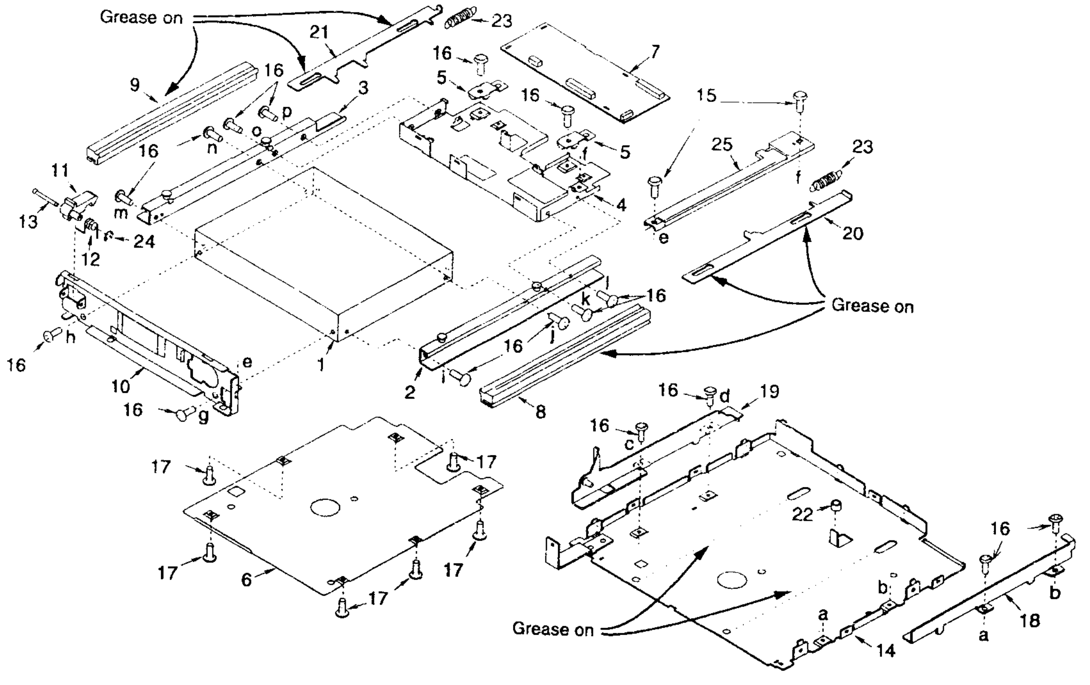
How to remove the CD mechanism

1. Remove the SCREWS(No.16x6,a~f) and take away LOWER CASE ASSY(No.14),RAIL HOLDER BRACKET(No.18),RAIL HOLDER ASSY (No.19), SP-LEAD HOLDER(No.25).
2. Remove the SCREWS(No.16x2,g,h) fixing the FRONE PLATE(No.10) from the front.
3. Remove the P-SCREW(No.17x6) and take away LOWER COVER(No.6).
4. Remove the SPRING(No.23x2).
5. Make a solder bridge between 15,16 pin of the FLEXIBLE PWB from the PICK UP ASSY (refer to the attentions on the page2).
6. Remove the hock(4 points) fixing CD DRIVE PWB (No.7) and remove the FLEXIBLE PWB (2 points).
7. When the SCREWS(No.16x8,i~p) on the right and left sides are removed, CD MECHANISM(No.1) can be removed.

※ Remove the solder bridge on the FLEXIBEL PWB when the CD MECHANISM is re-installed.

■ EXPLODED VIEW · PARTSLIST

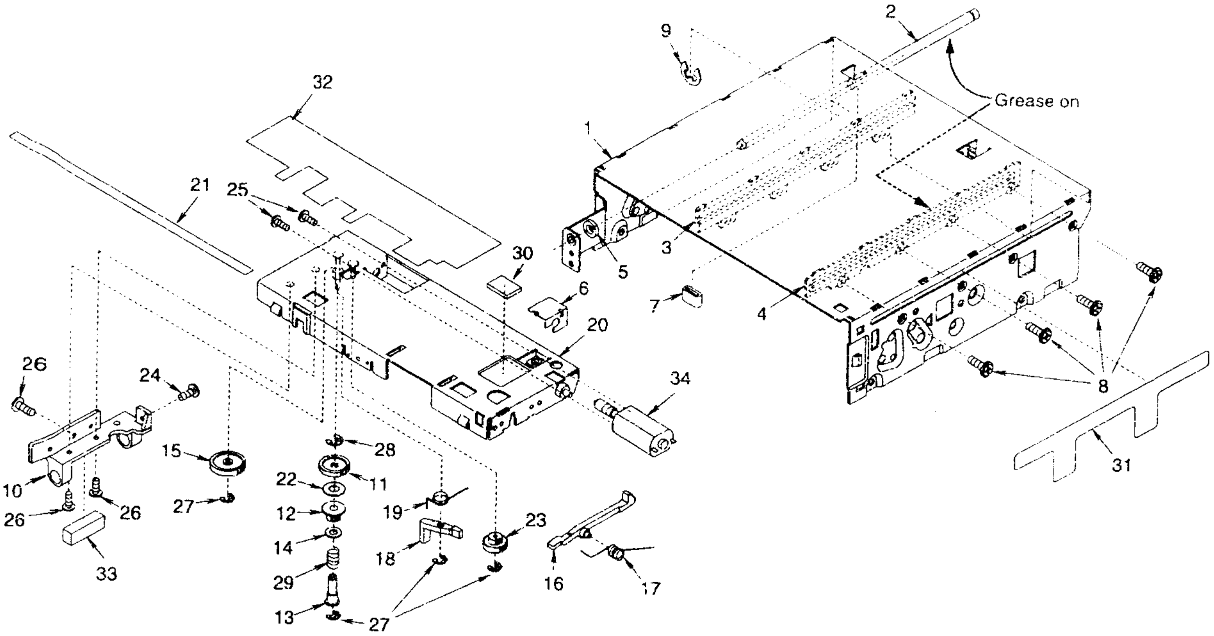
LOWER CASE/CD ASSY section



NO.	PART NO.	DESCRIPTION	Q'TY
1	929-0450-00	CD MECHANISM	1
2	948-0512-10	RAIL HOLDER ASSY (R)	1
3	948-0513-10	RAIL HOLDER ASSY (L)	1
4	331-2509-00	RAIL TRAY	1
5	331-2511-00	PLATE SPRING	2
6	304-0461-10	LOWER COVER	1
7	039-1734-00	CD DRIVE PWB (WITHOUT COMPONENT)	1
8	335-5813-00	RAIL (R)	1
9	335-5814-00	RAIL (L)	1
10	309-0711-10	FRONT PLATE	1
11	335-5801-00	LOCK LEVER	1
12	750-3331-01	SPRING	1
13	612-0397-00	SHAFT	1

NO.	PART NO.	DESCRIPTION	Q'TY
14	312-0004A	LOWER CASE ASSY	1
15	716-1611-00	P-SCREW	2
16	739-2630-10	P-SCREW(M2.6x3)	16
17	738-2030-16	P-SCREW(M2x3)	6
18	331-2508-10	RAIL HOLDER BRACKET	1
19	948-0495-10	RAIL HOLDER ASSY	1
20	331-2501-10	LOCK PLATE (R)	1
21	331-2502-00	LOCK PLATE (L)	1
22	631-2032-01	STOPPER	1
23	750-3332-00	SPRING	2
24	743-1500-20	E-RING	1
25	335-6355-00	SP-LEAD HOLDER	1

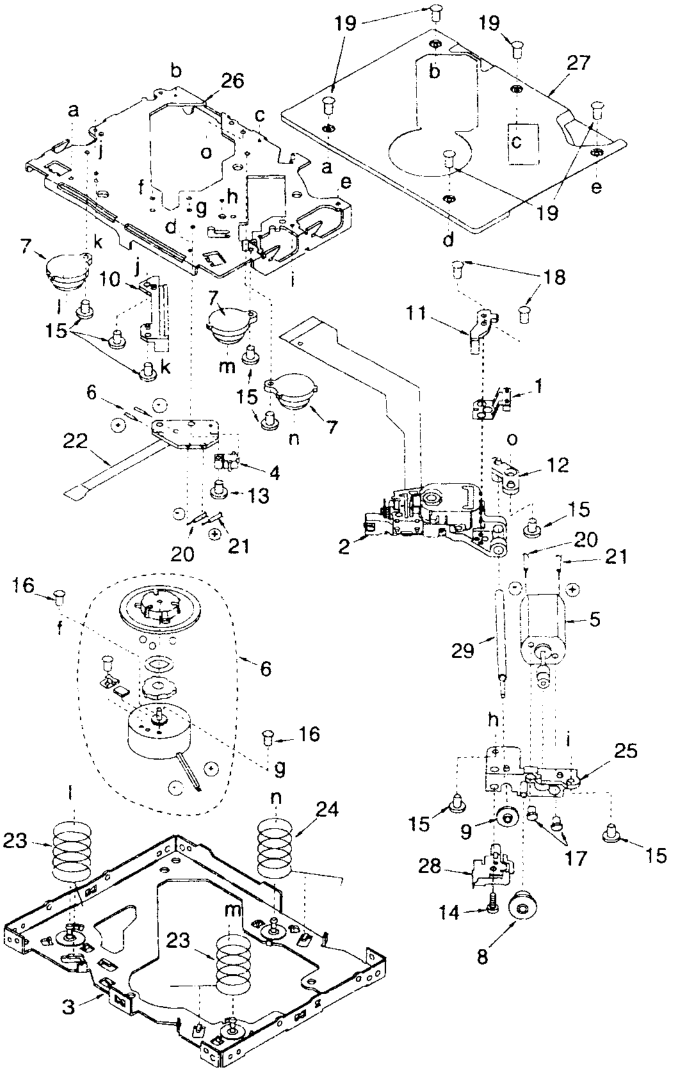
UPPER CASE ASSY section



NO.	PART NO.	DESCRIPTION	Q'TY
1	310-1665-02	UPPER CASE	1
2	612-0396-00	SHAFT	1
3	335-6314-00	RACK GEAR	1
4	331-2504-10	GUIDE RAIL	1
5	345-8229-00	O-RING	1
6	331-2675-00	WORM SPRING	1
7	631-2032-00	STOPPER	1
8	738-2630-17	P-SCREW(M2.6x3)	4
9	743-4000-00	E-RING	1
10	623-1032-00	HOLDER	1
11	613-0679-00	GEAR-B	1
12	613-0689-00	GEAR-C	1
13	341-1676-00	SPACER PIN	1
14	745-0794-00	WASHER	1
15	613-0688-00	GEAR-D	1
16	335-5816-00	LOCK LEVER	1
17	750-3333-00	LOCK SPRING	1

NO.	PART NO.	DESCRIPTION	QTY
18	335-5805-00	SWITCH LEVER	1
19	750-3334-00	SWITCH SPRING	1
20	948-0498-10	S-PLATE ASSY	1
21	347-5877-00	SAHDE	1
22	345-5121-01	RUBBER PARTS	1
23	613-0300-00	GEAR-A	1
24	781-2635-00	SCREW	1
25	714-2003-81	SCREW(M2x3)	2
26	714-2604-41	SCREW(M2.6x4)	[illegible]
27	743-1500-10	E-RING	[illegible]
28	743-3000-00	E-RING	1
29	750-3057-01	SPRING-G	[illegible]
30	345-8233-10	CUSHION	[illegible]
31	347-5869-00	PROTECT SHEET (R)	1
32	347-5897-20	SHADE	1
33	345-8232-10	CUSHION	1
34	634-0014-00	MOTOR ASSY	[illegible]

CD mechanism section
929-0450-00



NO.	PART NO.	DESCRIPTION	Q'TY
1	966-0454-00	SH-RACK ASSY	1
2	969-0052-01	PICK UP UNIT	1
3	966-0478-00	BASE PLATE ASSY	1
4	013-7100-00	SWITCH	1
5	SMA-146-100	SLED MOTOR ASSY	1
6	SMA-163-100	SPINDLE MOTOR ASSY	1
7	629-0067-00	DAMPER	3
8	621-0255-02	SECOND GEAR	1
9	621-0256-01	LS-GEAR	1
10	621-0390-00	PICK UP GUIDE	1
11	621-0391-02	SCREW HOLDER BASE	1
12	621-0392-01	LS-HOLDER(R)	1
13	714-2006-81	SCREW(M2x6)	1
14	716-0675-00	SCREW(M5x5)	1
15	716-1716-00	SCREW(M2x3)	8
16	716-1733-00	SCREW(M1.7x2.3)	2
17	732-2004-11	SEMS SCREW(M2x3.5)	2
18	739-1735-17	P-SCREW(M1.7x3.5)	2
19	738-1720-17	PRECICION SCREW(M1.7x2)	5
20	816-2474-00	MOTOR READ(WHT)	1
21	816-2473-00	MOTOR READ(BLUE)	1
22	039-1295-00	DRIVE FPC (WITHOUT COMPONENT)	1
23	750-3322-00	C-SPRING(T-TYPE)	2
24	750-3321-00	C-SPRING(K-TYPE)	1
25	621-0416-00	MOTOR HOLDER	1
26	620-0784-00	DRIVE PLATE	1
27	620-0786-00	MAKE UP PLATE	1
28	620-0785-00	DOG PLATE	1
29	624-3008-00	LEAD SCREW	1

■ELECTRICAL PARTS LIST

Main PWB(B1) section

Note) Several different parts of the same reference number are alternative parts. One of those parts is used in the set.

REF No.	PART No.	DESCRIPTION
BAT301	088-0034-11	CR2034-HE4
C001	168-1045-06	0.1 μF
C002	168-1045-06	0.1 μF
C003	168-1045-06	0.1 μF
C051	184-3383-32	16V3300 μF
C053	168-1045-06	0.1 μF
C054	042-0403-01	16V10 μF TAN
C055	163-1073-31	16V100 μF
C056	168-1045-06	0.1 μF
C057	168-1045-06	0.1 μF
C058	168-2222-05	2200pF
C059	042-0531-02	10V1000 μF
C060	168-1045-06	0.1 μF
C061	163-1073-31	16V100 μF
C068	163-4763-30	16V47 μF
C069	163-1063-30	16V10 μF
C070	163-1073-31	16V100 μF
C071	168-1045-06	0.1 μF
C072	168-1045-06	0.1 μF
C073	163-1063-30	16V10 μF
C074	163-2273-25	10V 220 μF
C075	168-1045-06	0.1 μF
C076	163-1063-30	16V10 μF
C077	163-1073-31	16V100 μF
C078	163-1063-30	16V10 μF
C079	168-1045-06	0.1 μF
C081	163-1053-60	50V1 μF
C082	168-1045-06	0.1 μF
C083	168-1045-06	0.1 μF
C084	168-1045-06	0.1 μF
C103	168-1045-06	0.1 μF
C105	042-0416-02	10V10 μF
C108	168-1045-06	0.1 μF
C111	163-4763-30	16V47 μF
C141	168-1535-06	0.015 μF
C142	163-1063-30	16V10 μF
C143	168-1045-06	0.1 μF
C144	168-1025-06	1000pF
C145	168-1025-06	1000pF
C146	166-1011-00	100pF CH
C147	168-1045-06	0.1 μF
C148	178-2242-78	0.22 μF
C149	178-2242-78	0.22 μF
C150	163-1073-31	16V100 μF
C151	168-1045-06	0.1 μF
C152	168-1045-06	0.1 μF
C153	163-1053-60	50V1 μF
C201	168-1045-06	0.1 μF
C202	042-0416-02	10V10 μF
C203	168-1045-06	0.1 μF
C204	166-1201-00	12pF CH
C205	166-1201-00	12pF CH
C206	168-1045-06	0.1 μF
C207	042-0416-02	10V10 μF
C208	168-1045-06	0.1 μF
C209	168-1032-05	0.01 μF
C210	168-1045-06	0.1 μF
C211	168-1045-06	0.1 μF
C212	042-0416-02	10V10 μF
C213	168-1045-06	0.1 μF
C214	168-1045-06	0.1 μF
C215	042-0403-01	16V10 μF TAN
C216	168-1022-05	1000pF
C217	042-0397-04	16V2.2 μF
C218	168-1032-05	0.01 μF
C219	168-1045-06	0.1 μF
C221	168-1045-06	0.1 μF
C223	168-1045-06	0.1 μF
C224	168-1045-06	0.1 μF
C225	168-1045-06	0.1 μF
C226	168-1045-06	0.1 μF
C227	168-1045-06	0.1 μF
C228	168-1045-06	0.1 μF
C229	168-1045-06	0.1 μF
C230	168-1045-06	0.1 μF
C231	168-1045-06	0.1 μF
C233	166-1011-00	100pF CH
C234	168-1022-05	1000pF
C301	168-1045-06	0.1 μF
C302	168-1045-06	0.1 μF
C303	168-1045-06	0.1 μF

REF No.	PART No.	DESCRIPTION
C304	168-1045-06	0.1 μF
C305	042-0416-02	10V10 μF
C306	168-1032-05	0.01 μF
C307	168-1045-06	0.1 μF
C308	168-1045-06	0.1 μF
C309	042-0416-02	10V10 μF
C310	168-1045-06	0.1 μF
C311	168-1045-06	0.1 μF
C312	042-0416-02	10V10 μF
C314	168-4712-05	470pF
C315	168-1045-06	0.1 μF
C316	168-1045-06	0.1 μF
C317	178-2242-78	0.22 μF
C318	168-1045-06	0.1 μF
C319	042-0416-02	10V10 μF
C320	178-4742-78	0.47 μF
C321	168-1045-06	0.1 μF
C323	042-0416-02	10V10 μF
C324	042-0416-02	10V10 μF
C325	168-1045-06	0.1 μF
C326	042-0416-02	10V10 μF
C327	168-1045-06	0.1 μF
C328	042-0416-02	10V10 μF
C332	042-0416-02	10V10 μF
C334	168-1045-06	0.1 μF
C335	168-1045-06	0.1 μF
C336	168-1045-06	0.1 μF
C337	168-1045-06	0.1 μF
C338	168-1045-06	0.1 μF
C339	168-1045-06	0.1 μF
C340	168-1045-06	0.1 μF
C401	168-1045-06	0.1 μF
C402	168-1045-06	0.1 μF
C403	042-0416-02	10V10 μF
C404	168-1045-06	0.1 μF
C405	042-0416-02	10V10 μF
C406	168-1045-06	0.1 μF
C407	168-1045-06	0.1 μF
C408	168-4712-05	470pF
C409	168-1045-06	0.1 μF
C410	178-4742-78	0.47 μF
C411	042-0416-02	10V10 μF
C412	168-1045-06	0.1 μF
C413	168-1045-06	0.1 μF
C414	168-1045-06	0.1 μF
C418	168-1022-05	1000pF
C419	168-1022-05	1000pF
C420	168-1022-05	1000pF
C421	168-1022-05	1000pF
C422	168-1022-05	1000pF
C423	168-1045-06	0.1 μF
C424	166-5601-00	56pF CH
C425	168-1022-05	1000pF
C426	168-1022-05	1000pF
C429	178-4742-78	0.47 μF
C430	168-1045-06	0.1 μF
C431	168-1045-06	0.1 μF
D001	001-0516-00	MA111
D002	001-0367-00	1SS226
D051	001-0188-01	1S1885A
D054	001-0516-00	MA111
D055	001-2602-90	U3FWK44N-T146
D060	001-0516-00	MA111
D062	001-0528-57	MA8120-H
D063	001-0516-00	MA111
D064	001-0516-00	MA111
D065	001-0516-00	MA111
D078	001-0528-11	MA8024
D079	001-0528-40	MA8075-L
D080	001-0367-00	1SS226
D081	001-0528-48	MA8091-H
D100	001-0516-00	MA111
D101	001-0584-13	MA8030
D202	001-0516-00	MA111
D203	001-0516-00	MA111
D204	001-0516-00	MA111
D205	001-0516-00	MA111
D206	001-0516-00	MA111

REF No.	PART No.	DESCRIPTION
D301	001-0655-00	1SS294
D302	001-0516-00	MA111
D508	001-0528-14	MA8030-L
D509	001-0528-14	MA8030-L
D511	001-4902-92	HZM27FA-TL
D512	001-4902-92	HZM27FA-TL
FIL201	060-3102-91	NFM51R00P206
FIL202	060-3104-00	NFM41P11C204
FIL301	060-3102-90	NFM51R00P106
FIL401	060-3103-00	NFM839R02G101B1
FIL402	060-3102-91	NFM51R00P206
FIL403	060-3102-91	NFM51R00P206
FIL404	060-3102-91	NFM51R00P206
FIL405	060-3102-91	NFM51R00P206
FIL406	060-3101-05	NFM39R12C102B1
FIL501	060-3101-05	NFM39R12C102B1
FIL502	060-3101-05	NFM39R12C102B1
FIL505	060-3101-05	NFM39R12C102B1
FIL506	060-3101-05	NFM39R12C102B1
FIL507	060-3101-05	NFM39R12C102B1
FIL508	060-3101-05	NFM39R12C102B1
FIL509	060-3101-05	NFM39R12C102B1
FIL510	060-3101-05	NFM39R12C102B1
IC051	051-3226-00	PQ1CZ1
IC054	051-1014-05	TA7291F
IC055	051-1905-01	AN77L05M
IC056	051-0718-10	NJM7808FA
IC101	051-6328-08	BU9480F
IC107	051-3013-00	M5203AFP
IC108	051-2035-00	TDA7052A
IC201	051-9307-30	MSM514260C
IC202	051-6326-00	LC895194-X85
IC203	051-1822-05	S-80732AN-DW-X
IC204	051-7236-08	TC7W126FU-EL
IC205	052-5030-00	μPD78014GC
IC301	051-1855-05	TC7W14F
IC303	052-3519-10	HD6437043AF49F
IC304	051-0869-55	NJM2103M
IC306	051-9108-00	TC551001BFTL-70
IC307	051-6807-00	μPD65804GJ-P06
IC308	051-9308-10	HM5118160CTT-6
IC309	051-9308-10	HM5118160CTT-6
IC310	051-9308-10	HM5118160CTT-6
IC311	051-9308-10	HM5118160CTT-6
IC312	052-3518-00	MBM29F800BA
IC313	052-3518-00	MBM29F800BA
IC401	051-9309-10	M5M5118165B
IC402	051-6416-00	HD64411F
IC403	051-6418-10	ADV7123KST50
IC404	051-3902-00	AD1580ART
J001	074-1174-02	10P
J201	074-1059-30	30P
J401	074-1179-74	24P
J501	074-1170-00	DIN 10P
J502	074-1213-01	OUTLET SOCKET
L001	010-2285-51	BLM21A05PT
L005	010-2285-51	BLM21A05PT
L051	010-3023-00	100 μH
L052	010-2279-00	4.7 μH
L101	010-2285-51	BLM21A05PT
L201	010-2285-51	BLM21A05PT
L202	010-2285-51	BLM21A05PT
L203	010-2285-51	BLM21A05PT
L204	010-2285-51	BLM21A05PT
L205	010-2285-51	BLM21A05PT
L206	010-2285-51	BLM21A05PT
L301	010-2285-51	BLM21A05PT
L302	010-2285-51	BLM21A05PT
L303	010-2285-51	BLM21A05PT
L304	010-2285-51	BLM21A05PT
L305	010-2285-51	BLM21A05PT
L307	010-2285-51	BLM21A05PT
L309	010-2285-51	BLM21A05PT
L313	010-2285-51	BLM21A05PT
L315	010-2285-51	BLM21A05PT
L401	010-2285-51	BLM21A05PT
L402	010-2285-51	BLM21A05PT
L403	010-2285-51	BLM21A05PT

REF No.	PART No.	DESCRIPTION
L404	010-2285-51	BLM21A05PT
Q001	102-2712-00	2SC2712
Q002	102-2712-00	2SC2712
Q003	125-0021-07	DTA113ZU
Q004	125-0002-02	RN2402
Q051	102-2712-00	2SC2712
Q052	102-2712-00	2SC2712
Q063	125-2004-02	RN1402
Q064	102-2873-00	2SC2873
Q065	102-2712-00	2SC2712
Q066	125-0002-02	RN2402
Q067	100-1162-00	2SA1162
Q068	102-2712-00	2SC2712
Q069	102-2712-00	2SC2712
Q070	125-2004-02	RN1402
Q071	125-2004-02	RN1402
Q072	101-1205-65	2SB1205S,T
Q073	125-2004-02	RN1402
Q075	102-2873-00	2SC2873
Q106	125-2004-02	RN1402
Q107	125-2004-02	RN1402
Q108	102-3326-00	2SC3326
Q109	125-2004-02	RN1402
Q110	125-2004-02	RN1402
Q204	060-4011-80	CPT-182S-C
Q301	125-0002-02	RN2402
Q501	102-2712-00	2SC2712
Q502	102-2712-00	2SC2712
Q503	102-2712-00	2SC2712
Q504	102-2712-00	2SC2712
Q505	125-2004-02	RN1402
Q506	125-2004-02	RN1402
Q507	125-2004-02	RN1402
Q508	125-2004-02	RN1402
R001	117-1031-10	1/10W 10kΩ
R002	117-1021-10	1/10W 1kΩ
R004	119-1021-10	1/16W 1kΩ
R005	119-1021-10	1/16W 1kΩ
R006	117-1021-10	1/10W 1kΩ
R007	119-4731-10	1/16W 47kΩ
R008	119-4731-10	1/16W 47kΩ
R009	117-1021-10	1/10W 1kΩ
R010	117-2721-10	1/10W 2.7kΩ
R011	117-2721-10	1/10W 2.7kΩ
R012	119-2231-10	1/16W 22kΩ
R013	119-1031-10	1/16W 10kΩ
R014	117-4711-10	1/10W 470Ω
R015	119-3331-10	1/16W 33kΩ
R016	119-1021-10	1/16W 1kΩ
R030	117-4711-10	1/10W 470Ω
R051	117-3311-10	1/10W 330Ω
R052	119-1041-10	1/16W 100kΩ
R053	119-1041-10	1/16W 100kΩ
R054	117-5611-10	1/10W 560Ω
R058	032-0106-75	1/10W 3kΩ ±0.5%
R059	032-0106-62	1/10W 1kΩ ±0.5%
R071	117-2711-10	1/10W 270Ω
R072	119-1031-10	1/16W 10kΩ
R073	119-1031-10	1/16W 10kΩ
R077	117-4791-10	1/10W 4.7Ω
R078	117-4731-10	1/10W 47kΩ
R081	116-3321-10	1/8W 3.3kΩ
R082	117-5621-10	1/10W 5.6kΩ
R083	119-1021-10	1/16W 1kΩ
R084	119-1021-10	1/16W 1kΩ
R085	119-5611-10	1/16W 560Ω
R086	117-1821-10	1/10W 1.8kΩ
R087	119-1041-10	1/16W 100kΩ
R088	119-1031-10	1/16W 10kΩ
R089	032-0104-60	1/4W 220Ω
R090	032-0104-60	1/4W 220Ω
R091	032-0104-57	1/4W 47Ω
R092	032-0104-57	1/4W 47Ω
R093	032-0104-57	1/4W 47Ω
R097	117-3911-10	1/10W 390Ω
R148	119-1041-10	1/16W 100kΩ
R153	119-2231-10	1/16W 22kΩ
R154	119-1031-10	1/16W 10kΩ

REF No.	PART No.	DESCRIPTION
R155	119-1231-10	1/16W 12kΩ
R156	119-2231-10	1/16W 22kΩ
R157	119-2231-10	1/16W 22kΩ
R158	119-2231-10	1/16W 22kΩ
R159	119-2231-10	1/16W 22kΩ
R160	119-3311-10	1/16W 330Ω
R161	119-6811-10	1/16W 680Ω
R162	119-1021-10	1/16W 1kΩ
R163	119-1021-10	1/16W 1kΩ
R164	119-1041-10	1/16W 100kΩ
R165	119-1221-10	1/16W 1.2kΩ
R166	119-4721-10	1/16W 4.7kΩ
R167	119-1041-10	1/16W 100kΩ
R168	119-2241-10	1/16W 220kΩ
R169	119-6831-10	1/16W 68kΩ
R170	119-1041-10	1/16W 100kΩ
R171	119-6831-10	1/16W 68kΩ
R201	050-0140-51	22Ω×4
R202	050-0140-51	22Ω×4
R203	050-0140-51	22Ω×4
R204	050-0140-51	22Ω×4
R205	119-1021-10	1/16W 1kΩ
R206	119-1241-10	1/16W 120kΩ
R207	119-1031-10	1/16W 10kΩ
R208	119-6801-10	1/16W 68Ω
R209	119-4731-10	1/16W 47kΩ
R210	050-0140-51	22Ω×4
R211	119-2201-10	1/16W 22Ω
R212	050-0140-51	22Ω×4
R213	119-8201-10	1/16W 82Ω
R214	119-8201-10	1/16W 82Ω
R215	119-8201-10	1/16W 82Ω
R216	119-8201-10	1/16W 82Ω
R217	119-1031-10	1/16W 10kΩ
R218	119-4701-10	1/16W 47Ω
R219	119-4701-10	1/16W 47Ω
R220	119-8201-10	1/16W 82Ω
R221	119-4701-10	1/16W 47Ω
R222	119-4701-10	1/16W 47Ω
R223	119-4701-10	1/16W 47Ω
R224	119-1031-10	1/16W 10kΩ
R225	119-1021-10	1/16W 1kΩ
R226	119-1031-10	1/16W 10kΩ
R227	119-1021-10	1/16W 1kΩ
R228	119-1031-10	1/16W 10kΩ
R229	119-1031-10	1/16W 10kΩ
R230	119-1031-10	1/16W 10kΩ
R231	119-1031-10	1/16W 10kΩ
R232	119-1041-10	1/16W 100kΩ
R233	119-1041-10	1/16W 100kΩ
R235	050-0140-51	22Ω×4
R237	050-0140-51	22Ω×4
R238	119-1041-10	1/16W 100kΩ
R239	119-1041-10	1/16W 100kΩ
R240	119-1041-10	1/16W 100kΩ
R241	119-1041-10	1/16W 100kΩ
R243	119-2201-10	1/16W 22Ω
R245	119-2201-10	1/16W 22Ω
R246	119-2201-10	1/16W 22Ω
R247	119-2201-10	1/16W 22Ω
R248	119-2201-10	1/16W 22Ω

REF No.	PART No.	DESCRIPTION
R249	119-2201-10	1/16W 22Ω
R250	119-2201-10	1/16W 22Ω
R251	119-1021-10	1/16W 1kΩ
R252	119-1021-10	1/16W 1kΩ
R253	119-1021-10	1/16W 1kΩ
R260	119-4731-10	1/16W 47kΩ
R261	119-1031-10	1/16W 10kΩ
R262	119-1041-10	1/16W 100kΩ
R270	119-2201-10	1/16W 22Ω
R271	119-2201-10	1/16W 22Ω
R272	119-2201-10	1/16W 22Ω
R273	119-2201-10	1/16W 22Ω
R274	050-0140-51	22Ω×4
R275	050-0140-51	22Ω×4
R301	119-1531-10	1/16W 15kΩ
R302	119-1021-10	1/16W 1kΩ
R303	119-1041-10	1/16W 100kΩ
R304	119-5611-10	1/16W 560Ω
R305	050-0140-51	22Ω×4
R306	119-2201-10	1/16W 22Ω
R307	119-4721-10	1/16W 4.7kΩ
R308	050-0140-51	22Ω×4
R309	050-0140-51	22Ω×4
R311	050-0140-51	22Ω×4
R312	119-2201-10	1/16W 22Ω
R313	119-5611-10	1/16W 560Ω
R314	119-1031-10	1/16W 10kΩ
R315	032-0106-52	1/10W 27kΩ ±0.5%
R316	119-2201-10	1/16W 22Ω
R317	050-0140-51	22Ω×4
R318	117-3021-10	1/10W 3kΩ
R319	117-2011-10	1/10W 200Ω
R320	032-0106-60	1/10W 10kΩ ±0.5%
R321	050-0140-51	22Ω×4
R322	119-1021-10	1/16W 1kΩ
R323	119-2201-10	1/16W 22Ω
R325	050-0140-51	22Ω×4
R326	050-0140-51	22Ω×4
R327	119-8201-10	1/16W 82Ω
R328	050-0140-51	22Ω×4
R329	050-0140-51	22Ω×4
R330	050-0140-51	22Ω×4
R331	119-2201-10	1/16W 22Ω
R332	119-2201-10	1/16W 22Ω
R333	050-0140-51	22Ω×4
R334	050-0140-51	22Ω×4
R335	119-2201-10	1/16W 22Ω
R337	050-0140-51	22Ω×4
R338	119-2201-10	1/16W 22Ω
R339	050-0140-51	22Ω×4
R340	119-2201-10	1/16W 22Ω
R341	050-0140-51	22Ω×4
R342	119-2201-10	1/16W 22Ω
R343	119-2201-10	1/16W 22Ω
R344	050-0140-51	22Ω×4
R345	050-0140-51	22Ω×4
R346	050-0140-51	22Ω×4
R347	050-0140-51	22Ω×4
R348	119-2201-10	1/16W 22Ω
R349	119-2201-10	1/16W 22Ω
R350	050-0140-51	22Ω×4

REF No.	PART No.	DESCRIPTION
R351	050-0140-51	22Ω×4
R352	119-1041-10	1/16W 100kΩ
R353	119-1041-10	1/16W 100kΩ
R354	119-1041-10	1/16W 100kΩ
R355	119-2201-10	1/16W 22Ω
R356	119-1031-10	1/16W 10kΩ
R357	119-4731-10	1/16W 47kΩ
R358	119-1021-10	1/16W 1kΩ
R359	119-1021-10	1/16W 1kΩ
R360	119-1041-10	1/16W 100kΩ
R361	119-1041-10	1/16W 100kΩ
R362	119-1041-10	1/16W 100kΩ
R363	119-1041-10	1/16W 100kΩ
R364	119-1041-10	1/16W 100kΩ
R401	050-0140-51	22Ω×4
R402	050-0140-51	22Ω×4
R403	050-0140-51	22Ω×4
R404	050-0140-51	22Ω×4
R405	050-0140-51	22Ω×4
R406	117-3021-10	1/10W 3kΩ
R407	050-0140-51	22Ω×4
R408	050-0140-51	22Ω×4
R409	050-0140-51	22Ω×4
R410	119-1031-10	1/16W 10kΩ
R411	050-0140-50	150Ω×4
R412	050-0140-50	150Ω×4
R413	050-0140-50	150Ω×4
R414	050-0140-50	150Ω×4
R415	119-1511-10	1/16W 150Ω
R416	119-1511-10	1/16W 150Ω
R417	119-1031-10	1/16W 10kΩ
R418	119-1031-10	1/16W 10kΩ
R419	117-2221-10	1/10W 2.2kΩ
R420	119-4721-10	1/16W 4.7kΩ
R421	119-1221-10	1/16W 1.2kΩ
R422	119-5611-10	1/16W 560Ω
R423	117-1511-10	1/10W 150Ω
R424	117-1511-10	1/10W 150Ω
R425	117-1511-10	1/10W 150Ω
R426	119-1211-10	1/16W 120Ω
R427	119-1011-10	1/16W 100Ω
R428	119-1021-10	1/16W 1kΩ
R501	119-1031-10	1/16W 10kΩ
R502	119-2231-10	1/16W 22kΩ
R503	119-1031-10	1/16W 10kΩ
R506	119-2231-10	1/16W 22kΩ
R507	117-1021-10	1/10W 1kΩ
R508	119-1031-10	1/16W 10kΩ
R510	119-4731-10	1/16W 47kΩ
R511	119-1031-10	1/16W 10kΩ
R512	119-4731-10	1/16W 47kΩ
R513	119-1031-10	1/16W 10kΩ
R514	119-1031-10	1/16W 10kΩ
R515	119-1031-10	1/16W 10kΩ
R516	119-1031-10	1/16W 10kΩ
R517	119-1031-10	1/16W 10kΩ
T050	009-0673-01	CHOKE
X201	061-3500-90	16.920MHz
X202	060-1503-50	CSTCC9.83MG-TL
X301	061-4501-50	7.0805MHz
X401	061-4502-50	8.402097MHz

Inverter PWB(B2) section(B2)

REF No.	PART No.	DESCRIPTION
C901	178-2242-78	0.22μF
C902	168-1042-78	16V 0.1μF
C903	168-1032-05	0.01μF
C904	178-2242-78	0.22μF
C905	043-0504-51	10V 3.3μF
C906	168-4712-05	470pF
C907	042-0416-02	10V10μF
C908	168-1022-05	1000pF
C909	043-0504-51	10V 3.3μF
C910	043-0504-51	10V 3.3μF
C911	043-0510-50	16V 22μF
C912	168-1032-05	0.01μF
C913	168-2732-05	16V 0.027μF

REF No.	PART No.	DESCRIPTION
C914	043-0521-50	3kV 22pF 5%
C915	043-0308-94	3kV 68pF
C916	168-1042-78	16V 0.1μF
C917	178-1052-78	1μF
D901	001-0528-29	MA8051-M
D902	001-0413-00	MA153
D903	001-0413-00	MA153
F901	060-8023-52	0.75A
IC901	051-3916-90	OZ965
IC902	051-3040-90	NJM2125F
IC903	125-9014-90	SI4559EY
J901	074-1100-09	9P
L901	010-3059-90	ZJYS51R5-2P-G

REF No.	PART No.	DESCRIPTION
P901	076-0568-00	2P
Q901	125-2004-03	RN1403
Q902	192-3734-00	2AC3734
Q903	190-1461-00	2SA1461
Q904	192-3734-00	2AC3734
Q905	102-2712-00	2SC2712
Q906	192-3734-00	2AC3734
R901	032-0104-56	1/4W 1.3kΩ
R902	032-0104-56	1/4W 1.3kΩ
R903	119-2431-10	1/16W 24kΩ
R904	119-6821-15	1/16W 6.8kΩ
R905	119-4731-10	1/16W 47kΩ
R906	119-4731-10	1/16W 47kΩ

REF No.	PART No.	DESCRIPTION
R907	119-1041-10	1/16W 100kΩ
R908	119-3331-10	1/16W 33kΩ
R909	119-1541-10	1/16W 150kΩ
R910	032-0104-01	1/4W 820Ω
R911	032-0104-01	1/4W 820Ω
R912	119-6831-10	1/16W 68kΩ
R913	119-5631-10	1/16W 56kΩ

REF No.	PART No.	DESCRIPTION
R914	119-1041-10	1/16W 100kΩ
R915	119-5631-10	1/16W 56kΩ
R916	119-1021-10	1/16W 1kΩ
R917	119-3321-10	1/16W 3.3kΩ
R919	119-3301-10	1/16W 33Ω
R920	119-2231-10	1/16W 22kΩ
R921	119-1051-10	1/16W 1MΩ

REF No.	PART No.	DESCRIPTION
R922	119-8211-10	1/16W 820Ω
R923	119-2021-10	1/16W 2kΩ
R924	119-1031-10	1/16W 10kΩ
S901	013-6514-50	LS6J2M-1FG
T903	007-1160-00	TRANS

CD drive PWB(B3) section

REF No.	PART No.	DESCRIPTION
C1	163-1073-10	6.3V100 µF
C2	163-4763-10	6.3V47 µF
C3	178-1042-78	0.1 µF
C4	176-2201-00	22pF CH
C5	176-1801-00	18pF CH
C6	176-1801-00	18pF CH
C7	176-8201-00	82pF CH
C8	178-1042-78	0.1 µF
C9	178-2242-78	0.22 µF
C10	178-2242-78	0.22 µF
C11	176-4701-00	47pF CH
C12	178-1532-78	0.015 µF
C13	178-1032-78	0.01 µF
C14	178-2722-78	2700pF
C15	178-4722-78	4700pF
C17	178-4712-78	470pF
C18	178-4712-78	470pF
C19	178-4732-78	0.047 µF
C20	178-4732-78	0.047 µF
C21	178-4732-78	0.047 µF
C22	178-4732-78	0.047 µF
C23	178-1032-78	0.01 µF
C25	163-1073-31	16V100 µF
C26	178-1042-78	0.1 µF
C27	178-1042-78	0.1 µF
C29	178-1042-78	0.1 µF
C30	178-1042-78	0.1 µF
C32	178-1032-78	0.01 µF
C33	178-1042-78	0.1 µF
C34	176-1501-00	15pF CH
C35	176-1501-00	15pF CH

REF No.	PART No.	DESCRIPTION
C39	178-1042-78	0.1 µF
C40	178-1042-78	0.1 µF
C41	163-1073-10	6.3V100 µF
C43	163-1073-10	6.3V100 µF
C44	163-4763-10	6.3V47 µF
C45	163-1073-10	6.3V100 µF
C46	178-1032-78	0.01 µF
C47	178-1042-78	0.1 µF
C48	178-1032-78	0.01 µF
C49	176-6801-00	68pF CH
C51	178-1032-78	0.01 µF
C52	178-1032-78	0.01 µF
C54	163-4763-10	6.3V47 µF
C55	178-1042-78	0.1 µF
C56	178-1042-78	0.1 µF
C58	178-1042-78	0.1 µF
C59	178-2222-78	2200pF
D1	001-7036-80	CL-200IR-X
IC1	051-6330-00	TC9432AF
IC2	051-5704-00	TA2096FN
IC3	051-6026-08	TA2058F
J1	074-1059-30	30P
J2	074-1049-17	17P
J3	074-1049-06	6P
J4	076-0478-02	2P
L1	010-2155-93	10 µH
L2	010-2199-74	10 µH J
Q1	101-1188-00	2SB1188
Q2	102-2712-00	2SC2712
R1	117-1011-10	1/10W 100Ω
R2	117-1841-10	1/10W 180kΩ

REF No.	PART No.	DESCRIPTION
R3	117-1841-10	1/10W 180kΩ
R4	117-2201-10	1/10W 22Ω
R5	117-8231-10	1/10W 82kΩ
R6	117-1041-10	1/10W 100kΩ
R7	117-1041-10	1/10W 100kΩ
R8	117-1031-10	1/10W 10kΩ
R9	117-2221-10	1/10W 2.2kΩ
R10	117-1031-10	1/10W 10kΩ
R11	117-1011-10	1/10W 100Ω
R12	117-1031-10	1/10W 10kΩ
R13	117-4731-10	1/10W 47kΩ
R15	117-4741-10	1/10W 470kΩ
R17	117-3331-10	1/10W 33kΩ
R19	117-3321-10	1/10W 3.3kΩ
R20	117-1031-10	1/10W 10kΩ
R21	117-3321-10	1/10W 3.3kΩ
R22	117-3321-10	1/10W 3.3kΩ
R23	117-3321-10	1/10W 3.3kΩ
R24	117-3321-10	1/10W 3.3kΩ
R26	117-1041-10	1/10W 100kΩ
R27	117-4711-10	1/10W 470Ω
R29	117-2211-10	1/10W 220Ω
R31	117-2201-10	1/10W 22Ω
R32	117-2201-10	1/10W 22Ω
R33	117-2201-10	1/10W 22Ω
R34	117-2201-10	1/10W 22Ω
R40	117-3321-10	1/10W 3.3kΩ
R41	117-1211-10	1/10W 120Ω
R42	117-2201-10	1/10W 22Ω
S1	013-3989-00	SPPB63
X1	061-3500-90	16.920MHz

LCD PWB(B4) section

REF No.	PART No.	DESCRIPTION
C701	178-1055-79	1 µF
C702	168-1045-06	0.1 µF
C703	168-1032-05	0.01 µF
C704	178-1055-79	1 µF
C705	168-1022-05	1000pF
C706	168-1022-05	1000pF
C707	168-1022-05	1000pF
C708	178-1055-79	1 µF
C709	168-1045-06	0.1 µF
C710	163-2273-25	10V 220 µF
C711	042-0397-05	6.3V3.3 µF
C712	178-1055-79	1 µF
C713	163-1063-50	35V10 µF
C714	168-2235-06	0.022 µF
C715	163-1063-30	16V10 µF
C716	166-5601-00	56pF CH
C717	168-2222-05	2200pF
C718	168-1032-05	0.01 µF
C719	042-0416-02	10V10 µF
C720	168-1022-05	1000pF
C721	178-4745-79	0.47 µF
C722	178-4745-79	0.47 µF
C723	178-4745-79	0.47 µF
C724	168-1032-05	0.01 µF
C725	163-3363-40	25V33 µF
C726	163-1053-60	50V1 µF
C727	168-1032-05	0.01 µF
C728	168-8212-05	820pF
C729	166-3301-00	33pF CH
C730	168-1032-05	0.01 µF
C731	168-1045-06	0.1 µF
C732	168-1032-05	0.01 µF

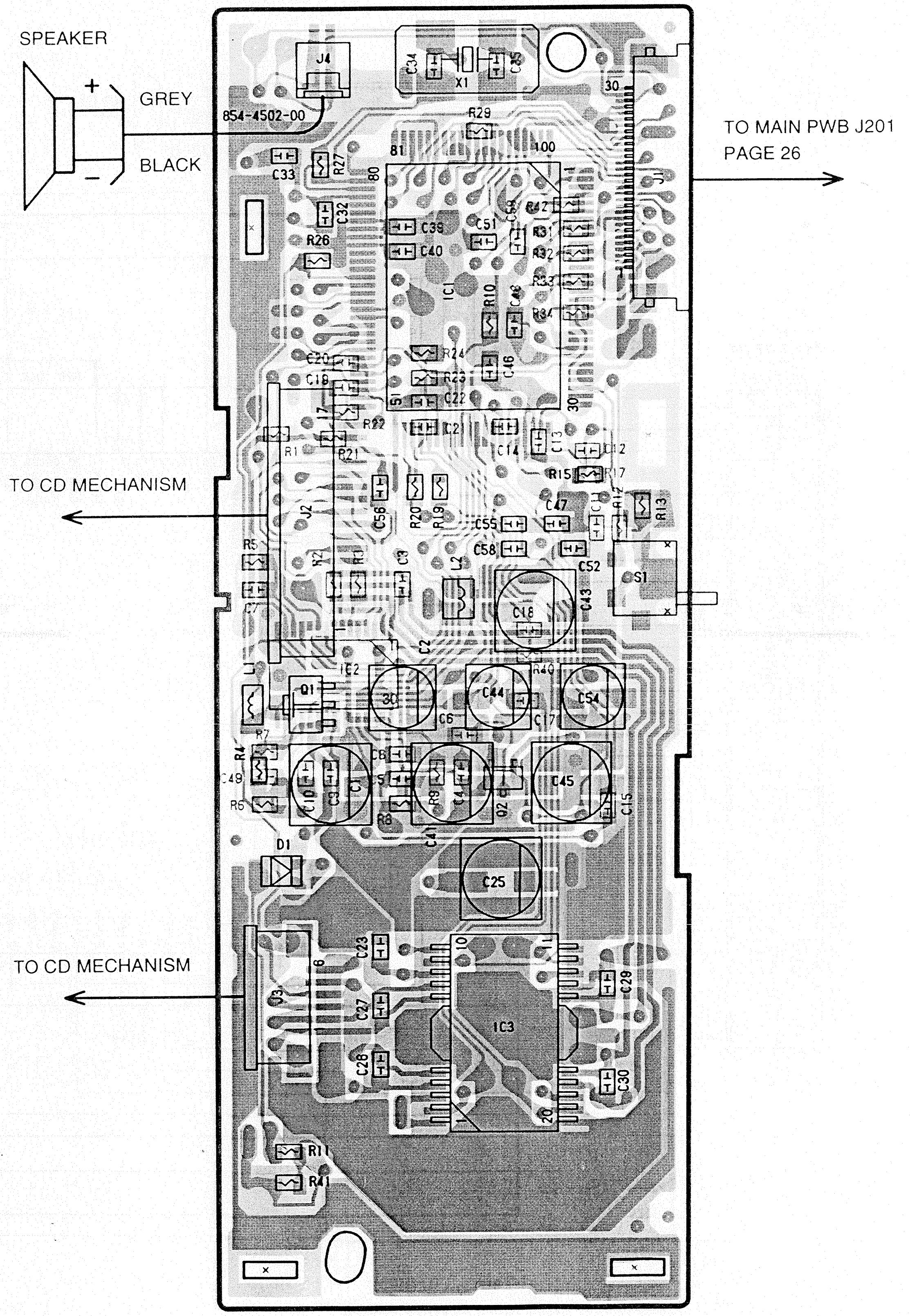
REF No.	PART No.	DESCRIPTION
C733	178-4732-78	0.047 µF
C734	178-1055-79	1 µF
C735	168-1032-05	0.01 µF
C736	178-1055-79	1 µF
C737	168-1032-05	0.01 µF
C738	042-0528-00	35V15 µF
C739	042-0528-00	35V15 µF
C740	163-2273-25	10V 220 µF
C741	042-0528-00	35V15 µF
C743	168-1032-05	0.01 µF
C744	178-1055-79	1 µF
C745	178-1055-79	1 µF
C746	178-1055-79	1 µF
C747	163-4763-30	16V47 µF
C748	178-1055-79	1 µF
C749	163-3363-40	25V33 µF
C750	163-4763-30	16V47 µF
C751	163-1073-10	6.3V100 µF
C752	178-4742-78	0.47 µF
C753	168-1032-05	0.01 µF
C754	166-8097-00	8pF CH
C755	168-1045-06	0.1 µF
C756	168-1045-06	0.1 µF
C757	168-1045-06	0.1 µF
C758	168-1045-06	0.1 µF
C759	168-1045-06	0.1 µF
C760	168-1045-06	0.1 µF
C761	168-1045-06	0.1 µF
C762	163-1063-30	16V10 µF
C763	168-1045-06	0.1 µF
C764	178-1055-79	1 µF
C765	163-1063-30	16V10 µF

REF No.	PART No.	DESCRIPTION
C766	163-1063-30	16V10 µF
C767	168-1045-06	0.1 µF
C768	178-1055-79	1 µF
C769	168-1045-06	0.1 µF
C770	168-1045-06	0.1 µF
C771	168-5612-05	560pF
C772	178-1042-78	0.1 µF
C773	168-1045-06	0.1 µF
C774	168-1045-06	0.1 µF
C775	178-1055-79	1 µF
C776	166-4711-00	470pF CH
C777	166-3301-00	33pF CH
C778	163-1063-30	16V10 µF
C779	166-3301-00	33pF CH
C780	168-1022-05	1000pF
C781	168-1045-06	0.1 µF
C782	168-1045-06	0.1 µF
C783	166-8201-50	82pF
C784	178-2242-78	0.22 µF
C785	168-1022-05	1000pF
C786	166-1011-00	100pF CH
C787	166-3911-50	390pF
C788	166-2211-00	220pF
C789	168-1045-06	0.1 µF
C790	168-1045-06	0.1 µF
C791	168-1045-06	0.1 µF
C792	163-1063-30	16V10 µF
C794	163-1063-30	16V10 µF
C795	163-2263-50	35V22 µF
C796	168-1045-06	0.1 µF
C798	168-1045-06	0.1 µF
C799	168-1045-06	0.1 µF

REF No.	PART No.	DESCRIPTION
C801	178-5642-78	0.56 μF
C802	178-1045-79	0.1 μF
C803	178-1055-79	1 μF
C804	176-2701-00	27pF CH
C805	178-1045-79	0.1 μF
C806	176-1011-00	100pF CH
C807	176-1011-00	100pF CH
C808	176-1011-00	100pF CH
C809	176-1011-00	100pF CH
C1700	168-1045-06	0.1 μF
C1701	163-1063-30	16V10 μF
C1702	178-1032-78	0.01 μF
C1703	178-1055-79	1 μF
C1704	178-1052-78	1 μF
CCT702	050-0122-58	470Ω×4
CCT703	050-0122-58	470Ω×4
CCT704	050-0122-58	470Ω×4
CCT705	050-0122-60	33Ω×4
CCT707	050-0122-60	33Ω×4
D701	001-0516-00	MA111
D702	001-0516-00	MA111
D703	001-0516-00	MA111
D704	001-2606-90	M1FS4
D705	001-2606-90	M1FS4
D706	001-0516-00	MA111
D707	001-0354-00	MA151WK
D708	001-3211-90	MA335-TX
D709	001-0367-00	1SS226
D710	001-0528-29	MA8051-M
D711	001-2606-90	M1FS4
D712	001-2606-90	M1FS4
D713	001-0516-00	MA111
D801	001-0528-32	MA8056-M
D802	001-0528-18	MA8036-L
D803	001-0528-18	MA8036-L
D804	001-0528-18	MA8036-L
D805	001-0528-18	MA8036-L
D806	001-0528-18	MA8036-L
IC701	051-5306-90	MM1117XF
IC702	051-6435-08	M62354FP-70ND
IC703	051-3913-90	NJM2368E
IC704	051-5313-10	IR3Y29BM
IC706	051-1292-00	NJM4565M-D
IC707	051-6035-01	LZ9GH22
IC708	051-3025-90	NJM2107F
IC801	051-1250-00	TC4S66F
IC802	052-7038-08	μPD6604GS
IR801	060-4008-00	RS171
J701	074-1179-74	24P
J702	074-1189-45	45P
J801	074-1205-45	45P
J802	074-1189-32	32P
J803	074-1201-09	9P
L701	010-3057-90	100 μH
L702	010-2199-83	56 μH J
L703	010-2199-86	100 μH J
L704	010-2174-24	100 μH
L705	010-3057-90	100 μH
L706	010-2199-30	33 μH J
L707	010-2199-74	10 μH J
L708	010-2199-66	2.2 μH J
L709	010-2323-70	15 μH
L710	010-2323-59	2.7 μH
L711	010-2199-86	100 μH J
Q701	100-1736-00	2SA1736
Q702	125-2004-02	RN1402
Q703	102-3326-00	2SC3326
Q704	102-2712-00	2SC2712
Q705	125-2004-02	RN1402
Q706	102-2873-00	2SC2873
Q707	102-2712-00	2SC2712
Q708	100-1213-00	2SA1213
Q709	125-2004-02	RN1402
Q801	125-2004-02	RN1402
Q802	125-2004-02	RN1402
Q803	102-2712-00	2SC2712
R701	117-7501-10	1/10W 75Ω
R702	119-1031-10	1/16W 10kΩ
R703	117-3311-10	1/10W 330Ω
R704	117-3311-10	1/10W 330Ω
R705	117-3311-10	1/10W 330Ω
R706	119-4721-10	1/16W 4.7kΩ
R707	119-5621-10	1/16W 5.6kΩ
R708	119-1021-10	1/16W 1kΩ
R709	119-1021-10	1/16W 1kΩ
R710	119-3341-10	1/16W 330kΩ
R711	119-2221-10	1/16W 2.2kΩ
R712	119-2221-10	1/16W 2.2kΩ
R713	119-1001-10	1/16W 10Ω
R714	119-6841-10	1/16W 680kΩ
R715	119-3931-10	1/16W 39kΩ
R716	119-6841-10	1/16W 680kΩ
R717	119-2231-10	1/16W 22kΩ
R719	119-2431-10	1/16W 24kΩ
R720	119-3341-10	1/16W 330kΩ
R722	119-2231-10	1/16W 22kΩ
R723	119-1841-10	1/16W 180kΩ
R725	119-2731-10	1/16W 27kΩ
R726	119-2231-10	1/16W 22kΩ
R727	119-2231-10	1/16W 22kΩ
R728	032-0098-03	1/10W 18kΩ ±2%
R730	119-3311-10	1/16W 330Ω
R731	119-5631-10	1/16W 56kΩ
R732	119-3931-10	1/16W 39kΩ
R734	119-5611-10	1/16W 560Ω
R739	119-1021-10	1/16W 1kΩ
R740	119-3931-10	1/16W 39kΩ
R741	119-2231-10	1/16W 22kΩ
R742	119-5621-10	1/16W 5.6kΩ
R743	119-3931-10	1/16W 39kΩ
R744	119-2231-10	1/16W 22kΩ
R745	119-4731-10	1/16W 47kΩ
R746	119-2231-10	1/16W 22kΩ
R747	119-1051-10	1/16W 1MΩ
R756	119-4731-10	1/16W 47kΩ
R757	119-2731-10	1/16W 27kΩ
R758	119-4731-10	1/16W 47kΩ
R759	119-3331-10	1/16W 33kΩ
R761	119-1011-10	1/16W 100Ω
R762	119-2221-10	1/16W 2.2kΩ
R763	119-1011-10	1/16W 100Ω
R764	119-1011-10	1/16W 100Ω
R767	119-5621-10	1/16W 5.6kΩ
R768	119-8221-10	1/16W 8.2kΩ
R769	119-1021-10	1/16W 1kΩ
R770	119-1001-10	1/16W 10Ω
R771	119-1531-10	1/16W 15kΩ
R772	119-1031-10	1/16W 10kΩ
R773	119-4721-10	1/16W 4.7kΩ
R774	119-2731-10	1/16W 27kΩ
R775	119-2221-10	1/16W 2.2kΩ
R776	119-4731-10	1/16W 47kΩ
R777	032-0092-33	1/10W 3.6kΩ ±1%
R778	032-0092-18	1/10W 4.7kΩ ±1%
R779	119-4731-10	1/16W 47kΩ
R780	119-6831-10	1/16W 68kΩ
R781	119-4331-15	1/16W 43kΩ
R782	119-1051-10	1/16W 1MΩ
R783	119-1051-10	1/16W 1MΩ
R784	119-6831-10	1/16W 68kΩ
R785	119-2711-10	1/16W 270Ω
R786	119-2421-15	1/16W 2.4kΩ
R787	119-1031-10	1/16W 10kΩ
R788	119-4731-10	1/16W 47kΩ
R789	119-1031-10	1/16W 10kΩ
R790	119-2241-10	1/16W 220kΩ
R791	119-5641-10	1/16W 560kΩ
R792	119-5641-10	1/16W 560kΩ
R793	119-2721-10	1/16W 2.7kΩ
R794	119-3321-10	1/16W 3.3kΩ
R795	119-1011-10	1/16W 100Ω
R796	119-3311-10	1/16W 330Ω
R797	119-1001-10	1/16W 10Ω
R798	119-5121-15	1/16W 5.1kΩ
R801	117-4701-10	1/10W 47Ω
R802	117-4721-10	1/10W 4.7kΩ
R803	117-4731-10	1/10W 47kΩ
R804	117-4711-10	1/10W 470Ω
R805	032-0092-26	1/10W 51kΩ ±1%
R806	117-4721-10	1/10W 4.7kΩ
R807	117-4721-10	1/10W 4.7kΩ
R808	117-4721-10	1/10W 4.7kΩ
R809	117-4721-10	1/10W 4.7kΩ
R810	117-2711-10	1/10W 270Ω
R811	117-2711-10	1/10W 270Ω
R812	117-2711-10	1/10W 270Ω
R813	117-2711-10	1/10W 270Ω
R814	117-3311-10	1/10W 330Ω
R815	117-3311-10	1/10W 330Ω
R816	117-3311-10	1/10W 330Ω
R817	117-3311-10	1/10W 330Ω
R1701	119-9121-15	1/16W 9.1kΩ
R1704	119-1031-10	1/16W 10kΩ
R1705	119-1031-10	1/16W 10kΩ
R1706	117-4721-10	1/10W 4.7kΩ
R1707	119-1031-10	1/16W 10kΩ
R1708	117-3321-10	1/10W 3.3kΩ
R1709	117-6821-10	1/10W 6.8kΩ
R1710	117-2221-10	1/10W 2.2kΩ
R1711	117-2221-10	1/10W 2.2kΩ
R1712	117-3331-10	1/10W 33kΩ
R1713	119-3301-10	1/16W 33Ω
S701	013-7204-00	SPPB64
S702	013-7204-00	SPPB64
S703	013-7204-00	SPPB64
S801	013-6514-50	LS6J2M-1FG
S802	013-6514-50	LS6J2M-1FG
S803	013-6514-50	LS6J2M-1FG
S804	013-6514-50	LS6J2M-1FG
S805	013-6514-50	LS6J2M-1FG
S806	013-6514-50	LS6J2M-1FG
S807	013-6514-50	LS6J2M-1FG
S808	013-6514-50	LS6J2M-1FG
S809	013-6514-50	LS6J2M-1FG
S810	013-6514-50	LS6J2M-1FG
S811	013-9901-00	SKQUAA
T701	007-1159-90	TRANS CEI120
TM701	073-0762-90	TERMINAL
VR701	012-5123-02	1kΩ
VR702	012-5123-08	33kΩ
VR703	012-5123-08	33kΩ
VR704	012-5123-08	33kΩ
VR705	012-5123-08	33kΩ
VR706	012-5123-08	33kΩ
VR707	012-5123-06	10kΩ
VR708	012-5123-06	10kΩ
VR709	012-5123-60	100kΩ
X701	061-1078-00	3.579545MHz

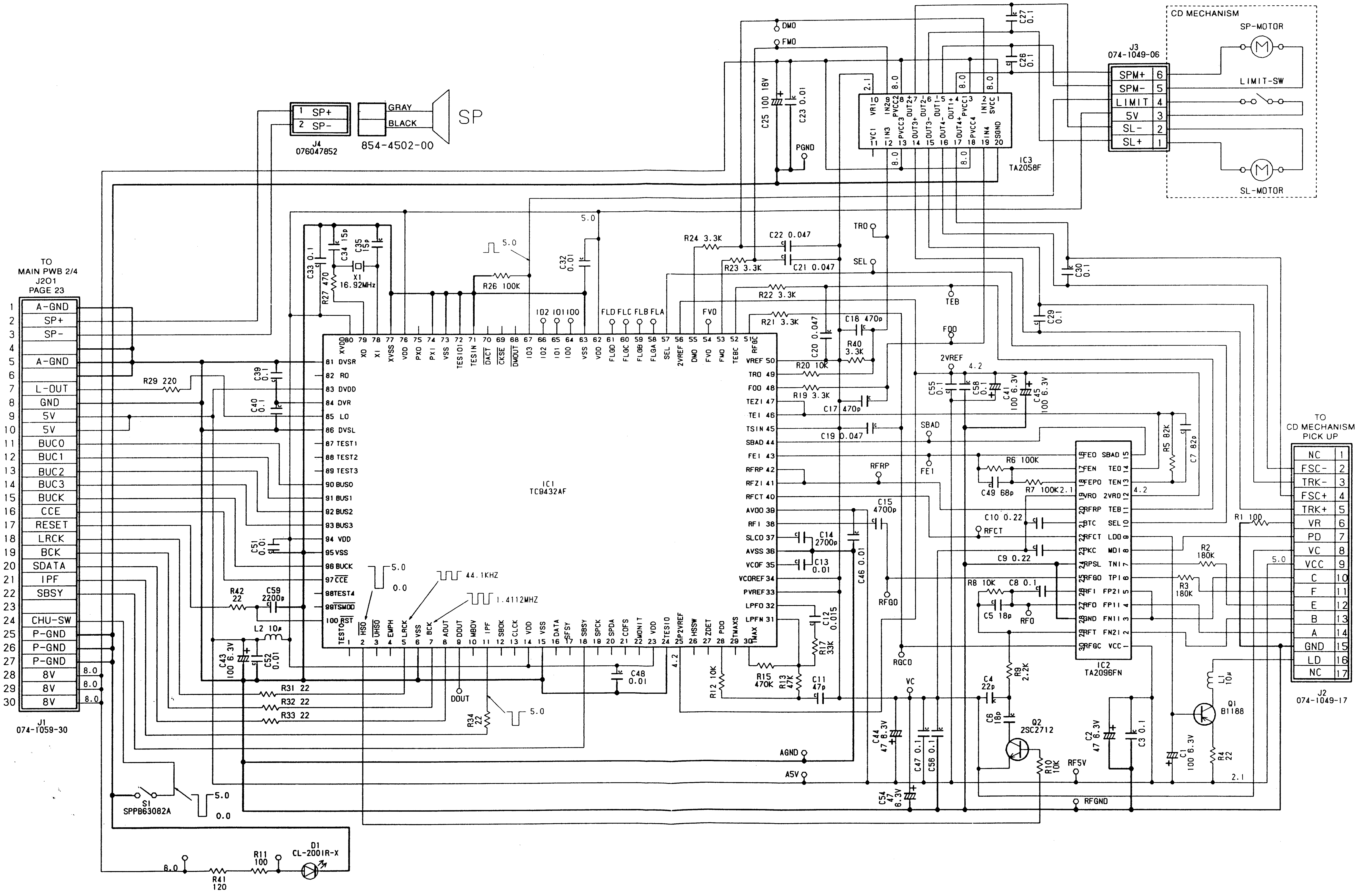
▩ PRINTED WIRING BOARD

CD Drive PWB (B3) section



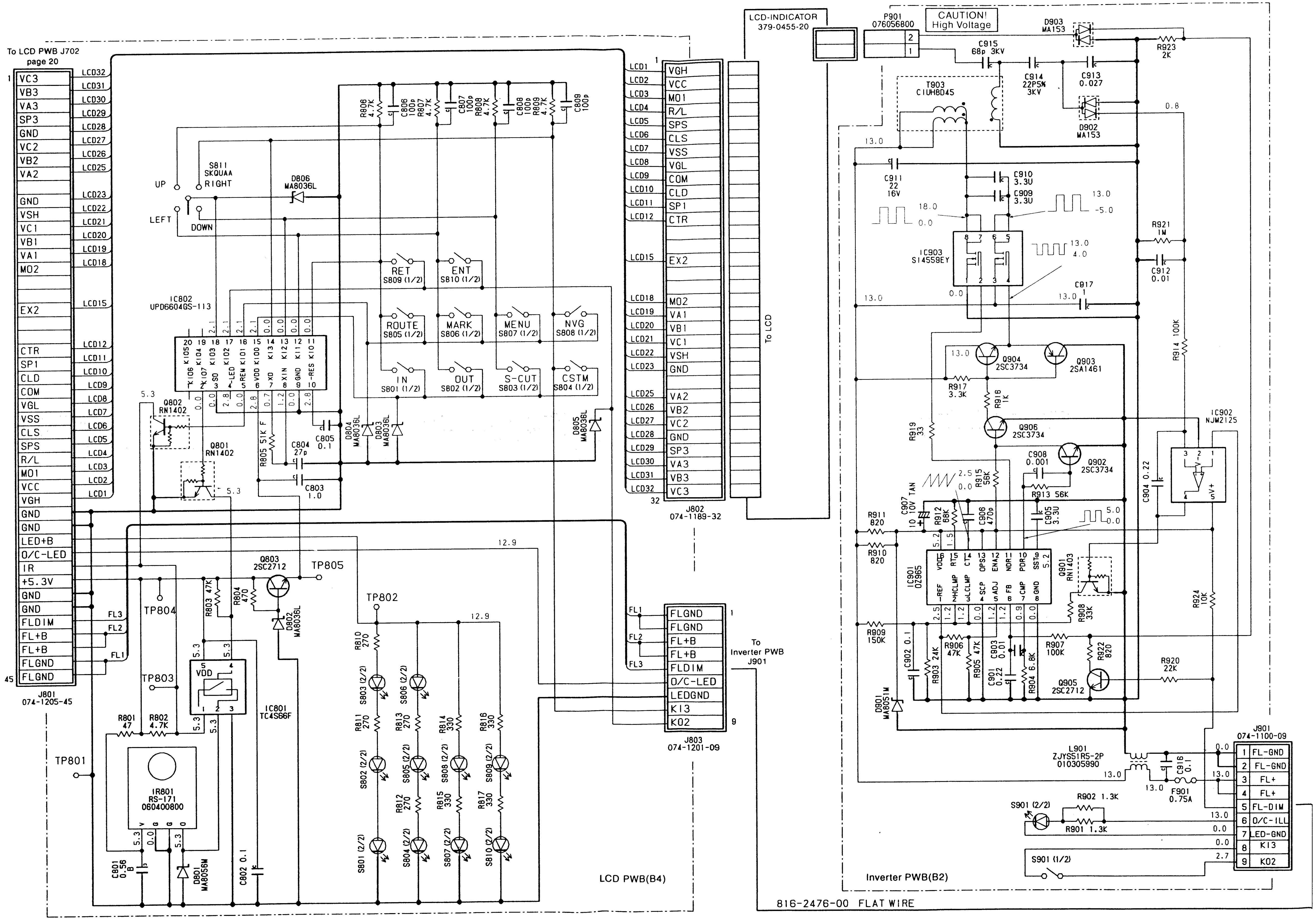
■CIRCUIT DIAGRAM

CD drive PWB(B3) section

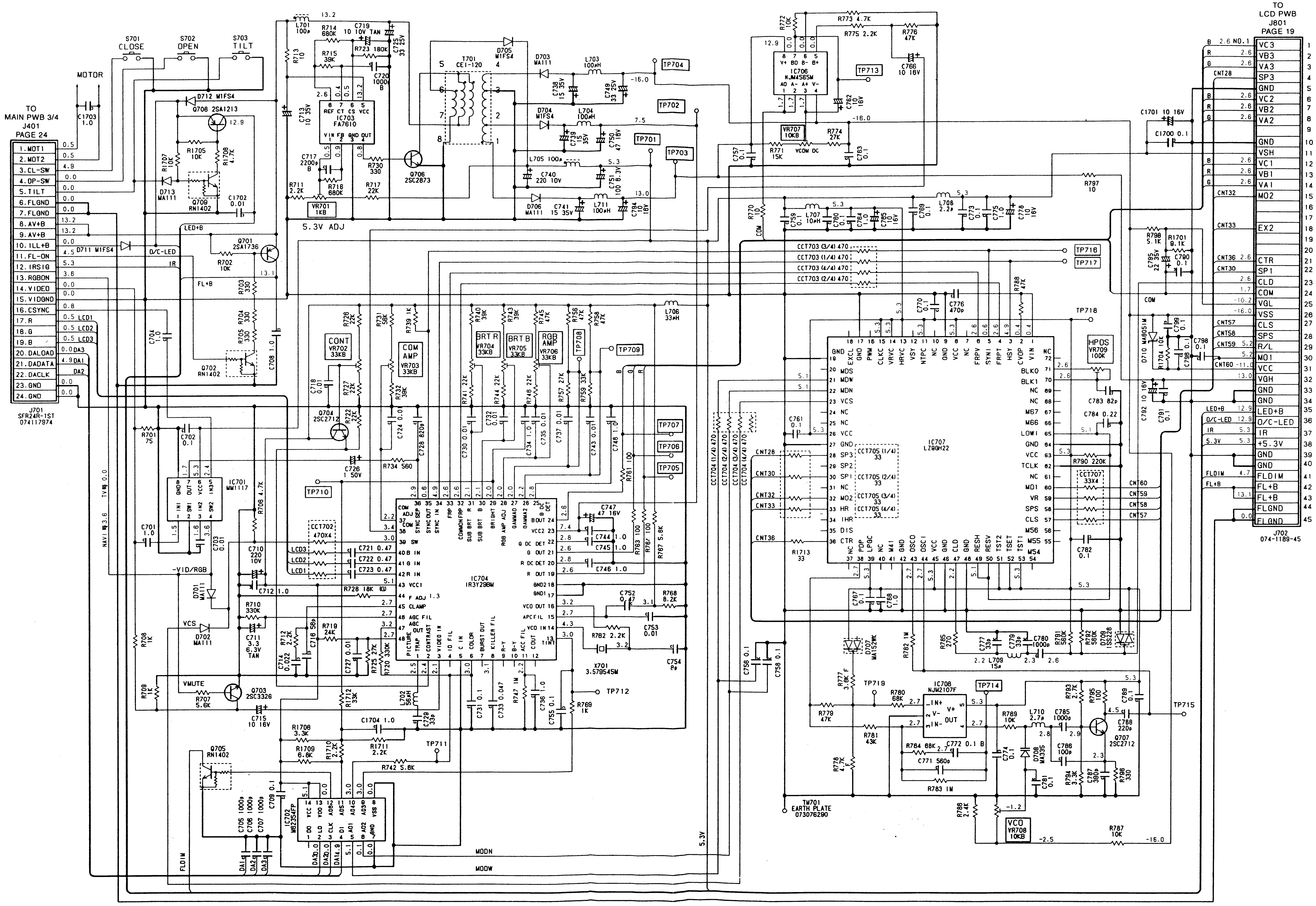


TO MAIN PWB 2/4 J201 PAGE 23
J1 074-1059-30
A-GND
SP+
SP-
L-OUT
GND
5V
BUC0
BUC1
BUC2
BUC3
BUCK
CCE
RESET
LRCK
BCK
SDATA
IPF
SBSY
CHU-SW
P-GND
8V
J4 076047852
854-4502-00
SP
GRAY
BLACK
IC1 TC9432AF
X1 16.92MHz
44.1KHZ
1.4112MHZ
IC2 TA2096FN
IC3 TA2058F
J3 074-1049-06
CD MECHANISM
SP-MOTOR
LIMIT-SW
SL-MOTOR
SPM+
SPM-
LIMIT
SL-
SL+
TO CD MECHANISM PICK UP
J2 074-1049-17
NC
FSC-
TRK-
FSC+
TRK+
VR
PD
VC
VCC
C
F
E
B
A
LD
Q1 B1188
Q2 2SC2712
S1 SPPB63082A
D1 CL-2001R-X
R41 120
R11 100
DMO
FMO
PGND
TRO
SEL
TEB
FOO
2VREF
SBAD
FEI
RFRP
RFCT
RFGO
RGCO
RFO
VC
AGND
A5V
RF5V
RFGND
DOUT

LCD PWB(B4)1/2 · Inverter PWB(B2) sectoin

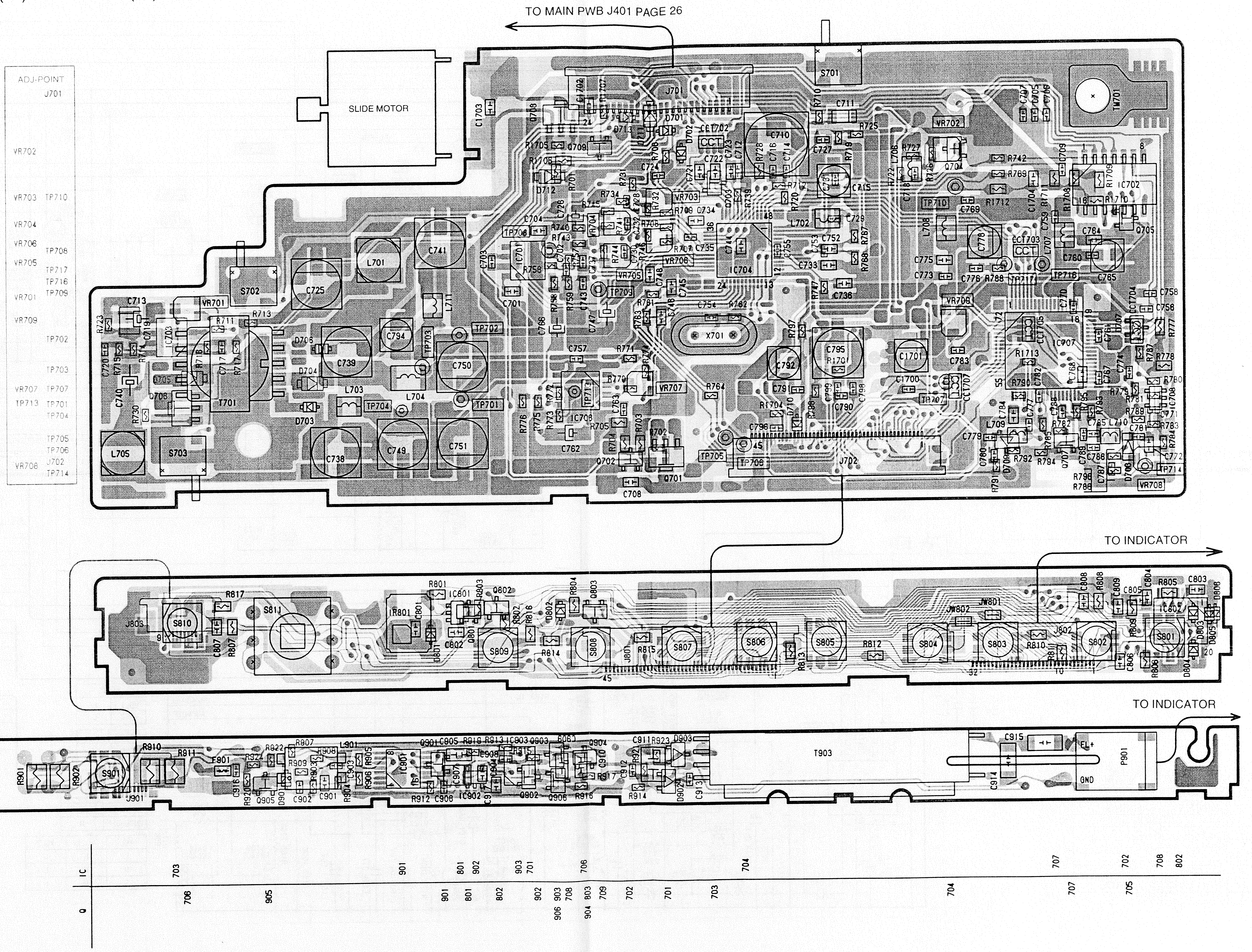

To LCD PWB J702
page 20
VC3
VB3
VA3
SP3
GND
VC2
VB2
VA2
VSH
VC1
VB1
VA1
MO2
EX2
CTR
SP1
CLD
COM
VGL
VSS
CLS
SPS
R/L
MO1
VCC
VGH
LED+B
O/C-LED
IR
+5.3V
FLDIM
FL+B
FLGND
J801
074-1205-45
TP801
TP802
TP803
TP804
TP805
IC802
UPD6604GS-113
Q801
RN1402
Q802
RN1402
Q803
2SC2712
IC801
TC4S66F
IR801
RS-171
060400800
D801
MA8056M
D802
MA8036L
D803
MA8036L
D804
MA8036L
D805
MA8036L
D806
MA8036L
S811
SKQUAA
UP
DOWN
LEFT
RIGHT
RET
S809 (1/2)
ENT
S810 (1/2)
ROUTE
S805 (1/2)
MARK
S806 (1/2)
MENU
S807 (1/2)
NVG
S808 (1/2)
IN
S801 (1/2)
OUT
S802 (1/2)
S-CUT
S803 (1/2)
CSTM
S804 (1/2)
J802
074-1189-32
J803
074-1201-09
To Inverter PWB
J901
LCD-INDICATOR
379-0455-20
To LCD
LCD PWB(B4)
P901
076056800
CAUTION!
High Voltage
T903
C1UH8D45
D902
MA153
D903
MA153
IC903
S14558EY
IC901
OZ965
IC902
NJM2125
Q901
RN1403
Q902
2SC3734
Q903
2SA1461
Q904
2SC3734
Q905
2SC2712
Q906
2SC3734
L901
ZJYS51R5-2P
010305990
F901
0.75A
S901 (1/2)
S901 (2/2)
J901
074-1100-09
FL-GND
FL+
FL-DIM
O/C-ILL
LED-GND
K13
K02
Inverter PWB(B2)
816-2476-00 FLAT WIRE

LCD PWB (B2) 2/2 section


TO MAIN PWB 3/4 J401 PAGE 24
1. MOT1
2. MOT2
3. CL-SW
4. OP-SW
5. TILT
6. FLGND
7. FLGND
8. AV+B
9. AV+B
10. ILL+B
11. FL-ON
12. IRSIG
13. RGBON
14. VIDEO
15. VIDGND
16. CSYNC
17. R
18. G
19. B
20. DALOAD
21. DADATA
22. DACLK
23. GND
24. GND
J701 SFR24R-1ST 074117974
MOTOR
S701 CLOSE
S702 OPEN
S703 TILT
C1703 1.0
D712 M1FS4
Q708 2SA1213
R1705 10K
R1707 10K
R1706 4.7K
D713 MA111
Q709 RN1402
C1702 0.01
LED+B
D711 M1FS4
O/C-LED
IR
FL+B
Q701 2SA1736
R702 10K
R703 330
R704 330
R705 330
Q702 RN1402
C704 1.0
C708 1.0
L701 100μ
R714 680K
C719 10 10V TAN
R715 39K
R723 180K
C725 33 25V
C720 1000p
R713 10
C713 10 35V
IC703 FA7610
C717 2200p
R711 2.2K
R716 680K
R730 330
R717 22K
VR701 1KB
5.3V ADJ
Q706 2SC2873
T701 CEI-120
D705 M1FS4
D703 MA111
L703 100μH
C738 15 35V
C749 33 25V
D704 M1FS4
L704 100μH
C739 15 35V
C750 47 16V
L705 100μ
C740 220 10V
C751 100 6.3V
D706 MA111
C741 15 35V
L711 100μH
C794 10 16V
TP704
TP702
TP701
TP703
R772 10K
R773 4.7K
R775 2.2K
R776 47K
IC706 NJM4565M
C766 10 16V
TP713
C762 10 16V
VR707 10KB
R774 27K
R771 15K
VCOM DC
C757 0.1
C763 0.1
TO LCD PWB J801 PAGE 19
VC3
VB3
VA3
SP3
GND
VC2
VB2
VA2
GND
VSH
VC1
VB1
VA1
MO2
EX2
CTR
SP1
CLD
COM
VGL
VSS
CLS
SPS
R/L
MO1
VCC
VGH
GND
GND
LED+B
O/C-LED
IR
+5.3V
GND
GND
FLDIM
FL+B
FL+B
FLGND
FLGND
J702 074-1189-45
C1701 10 16V
C1700 0.1
R797 10
R798 5.1K
R1701 9.1K
C795 22 35V
C790 0.1
D710 MA8051M
R1704 10K
C799 0.1
C798 0.1
C796 0.1
C792 10 16V
C791 0.1
L707 10μH
C759 0.1
C760 0.1
C764 1.0
C765 10 16V
C769 0.1
L708 2.2μ
C773 0.1
C775 1.0
C778 10 16V
R770 10
CCT703 (3/4) 470
CCT703 (1/4) 470
CCT703 (4/4) 470
CCT703 (2/4) 470
TP716
TP717
R788 47K
C770 0.1
C776 470p
TP718
HPOS VR709 100K
IC707 LZ9GH22
C783 82p
C784 0.22
R790 220K
CCT707 33X4
C782 0.1
CCT705 (1/4) 33
CCT705 (2/4) 33
CCT705 (3/4) 33
CCT705 (4/4) 33
CCT704 (1/4) 470
CCT704 (2/4) 470
CCT704 (3/4) 470
CCT704 (4/4) 470
C761 0.1
R1713 33
C767 0.1
C768 1.0
D707 MA152WK
R782 1M
R785 270
C777 33p
C779 33p
C780 1000p
L708 15μ
R791 560K
R792 560K
D709 1SS226
C756 0.1
C758 0.1
R777 3.6K F
TP719
R780 68K
IC708 NJM2107F
TP714
R779 47K
R781 43K
R789 10K
L710 2.7μ
C785 1000p
Q707 2SC2712
R793 2.7K
R795 100
C789 0.1
C788 220p
TP715
R784 68K
C772 0.1 B
C771 560p
C774 0.1
D708 MA335
C786 100p
C781 0.1
R794 3.3K
C787 390p
R796 330
R783 1M
R778 4.7K
TM701 EARTH PLATE 073076290
R786 2.4K
VCO VR708 10KB
R787 10K
R706 1.6K
R740 39K
R743 39K
R745 47K
R756 47K
R758 47K
L706 33μH
CONT VR702 33KB
COM AMP VR703 33KB
BRT R VR704 33KB
BRT B VR705 33KB
RGB AMP VR706 33KB
TP708
TP709
R726 22K
R731 56K
R739 1K
C718 0.01
R727 22K
R732 39K
R741 22K
R744 22K
R748 22K
R757 27K
R759 33K
Q704 2SC2712
R722 22K
C724 0.01
C728 820p
C730 0.01
C732 0.01
C734 1.0
C735 0.01
C737 0.01
C743 0.01
C748 1.0
TP707
TP706
TP705
R761 100
C726 1 50V
R734 560
TP710
C747 47 16V
C744 1.0
C745 1.0
C746 1.0
R763 100
R767 5.6K
IC704 IR3Y29BM
CCT702 470X4
C721 0.47
C722 0.47
C723 0.47
R728 18K
C752 0.47
R768 8.2K
C753 0.01
R782 2.2K
X701 3.579545M
C754 8p
R701 75
C702 0.1
IC701 MM1117
R708 4.7K
C701 1.0
C703 0.01
C710 220 10V
C712 1.0
-VID/RGB
D701 MA111
R710 330K
VCS
D702 MA111
C711 3.3 6.3V TAN
R712 2.2K
C716 56p
R719 24K
C714 0.022
C727 0.01
R725 27K
R720 330K
R708 1K
VMUTE
Q703 2SC3326
R709 1K
R707 5.6K
C715 10 16V
R1712 33K
L702 56μH
C729 33p
C731 0.1
C733 0.047
R747 1M
C736 0.1
C755 0.1
R769 1K
TP712
R1708 3.3K
C1704 1.0
R1709 6.8K
R1710 2.2K
R1711 2.2K
TP711
R742 5.6K
Q705 RN1402
C709 0.1
C705 1000p
C706 1000p
C707 1000p
IC702 M62354FP
MODN
MODW
FLDIM
DA1
DA2
DA3
5.3V
TV
NAVI

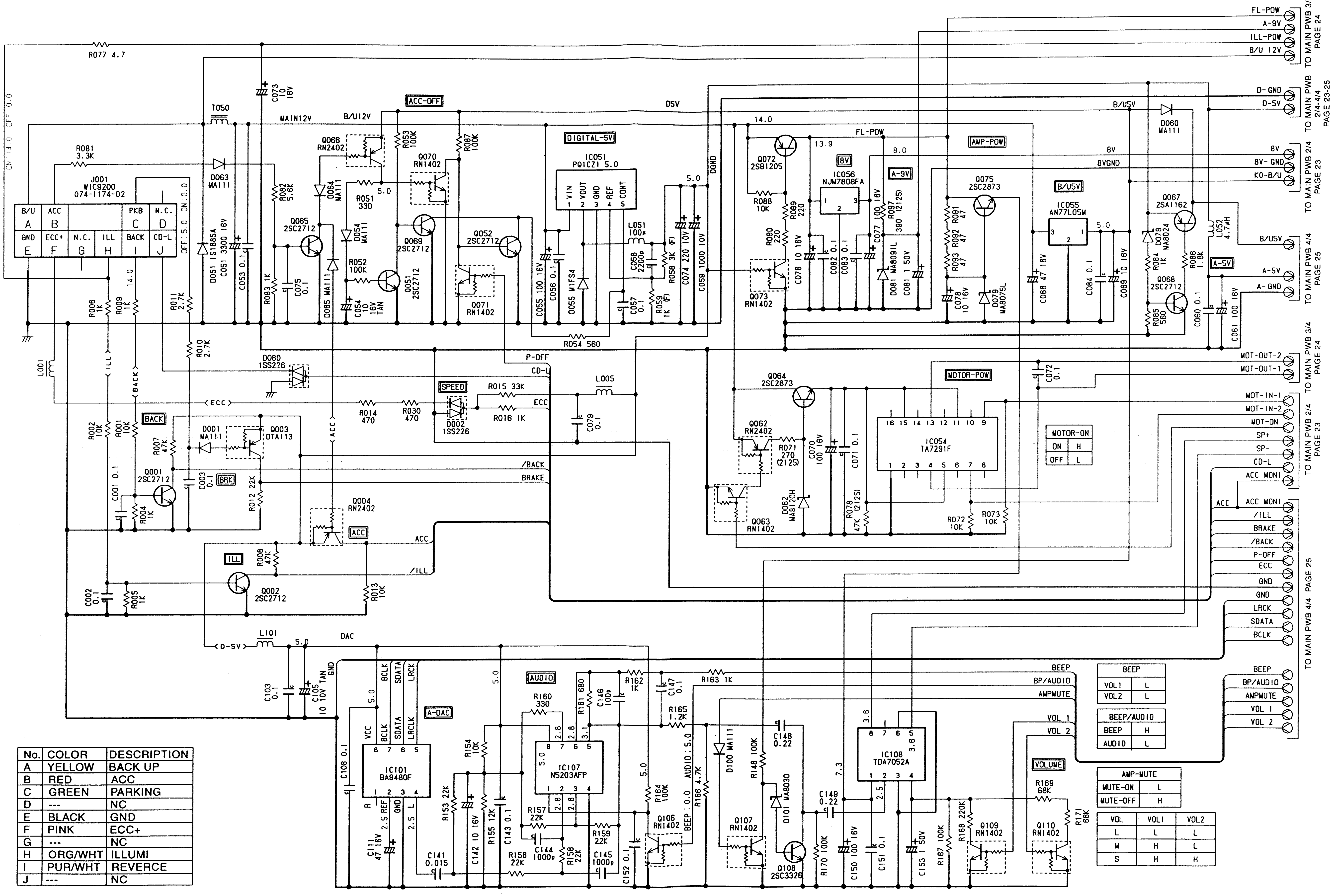
PRINTED WIRING BOARD

LCD PWB (B2) · Inverter PWB (B4) section


TO MAIN PWB J401 PAGE 26
SLIDE MOTOR
ADJ-POINT
J701
VR702
VR703 TP710
VR704
VR706 TP708
VR705 TP717
TP716
VR701 TP709
VR709
TP702
TP703
VR707 TP707
TP713 TP701
TP704
TP705
TP706
VR708 J702
TP714
TO INDICATOR
TO INDICATOR
T903
P901
GND
IC
703
901
801
902
903
701
706
704
707
702
708
802
Q
706
905
901
801
802
902
906
903
708
904
803
709
702
701
703
704
707
705

■CIRCUIT DIAGRAM

Main PWB (BI)1/4 section


FL-POW
A-9V
ILL-POW
B/U 12V
TO MAIN PWB 3/4 PAGE 24
D-GND
D-5V
TO MAIN PWB 2/4-4/4 PAGE 23-25
8V
8V-GND
KO-B/U
TO MAIN PWB 2/4 PAGE 23
B/U5V
A-5V
A-GND
TO MAIN PWB 4/4 PAGE 25
MOT-OUT-2
MOT-OUT-1
TO MAIN PWB 3/4 PAGE 24
MOT-IN-1
MOT-IN-2
MOT-ON
SP+
SP-
CD-L
ACC MONI
TO MAIN PWB 2/4 PAGE 23
ACC MONI
/ILL
BRAKE
/BACK
P-OFF
ECC
GND
GND
LRCK
SDATA
BCLK
BEEP
BP/AUDIO
AMPMUTE
VOL 1
VOL 2
TO MAIN PWB 4/4 PAGE 25
J001 WIC9200 074-1174-02
R077 4.7
T050
MAIN12V
B/U12V
ACC-OFF
D5V
DIGITAL-5V
IC051 PQ1CZ1 5.0
IC056 NJM7808FA
8V
A-9V
AMP-POW
B/U5V
IC055 AN77L05M
A-5V
MOTOR-POW
IC054 TA7291F
SPEED
BACK
BRK
ACC
ILL
L101
DAC
A-DAC
IC101 BA9480F
AUDIO
IC107 N5203AFP
IC108 TDA7052A
VOLUME
Q001 2SC2712
Q002 2SC2712
Q003 DTA113
Q004 RN2402
Q051 2SC2712
Q052 2SC2712
Q062 RN2402
Q063 RN1402
Q064 2SC2873
Q065 2SC2712
Q066 RN2402
Q067 2SA1162
Q068 2SC2712
Q069 2SC2712
Q070 RN1402
Q071 RN1402
Q072 2SB1205
Q073 RN1402
Q075 2SC2873
Q106 RN1402
Q107 RN1402
Q108 2SC3326
Q109 RN1402
Q110 RN1402
D001 MA111
D002 1SS226
D051 1S1885A
D055 MIFS4
D060 MA111
D062 MA8120H
D063 MA111
D064 MA111
D065 MA111
D078 MA8024
D079 MA8075L
D080 1SS226
D081 MA8081L
D100 MA111
D101 MA8030

No.	COLOR	DESCRIPTION
A	YELLOW	BACK UP
B	RED	ACC
C	GREEN	PARKING
D	---	NC
E	BLACK	GND
F	PINK	ECC+
G	---	NC
H	ORG/WHT	ILLUMI
I	PUR/WHT	REVERCE
J	---	NC

MOTOR-ON	
ON	H
OFF	L

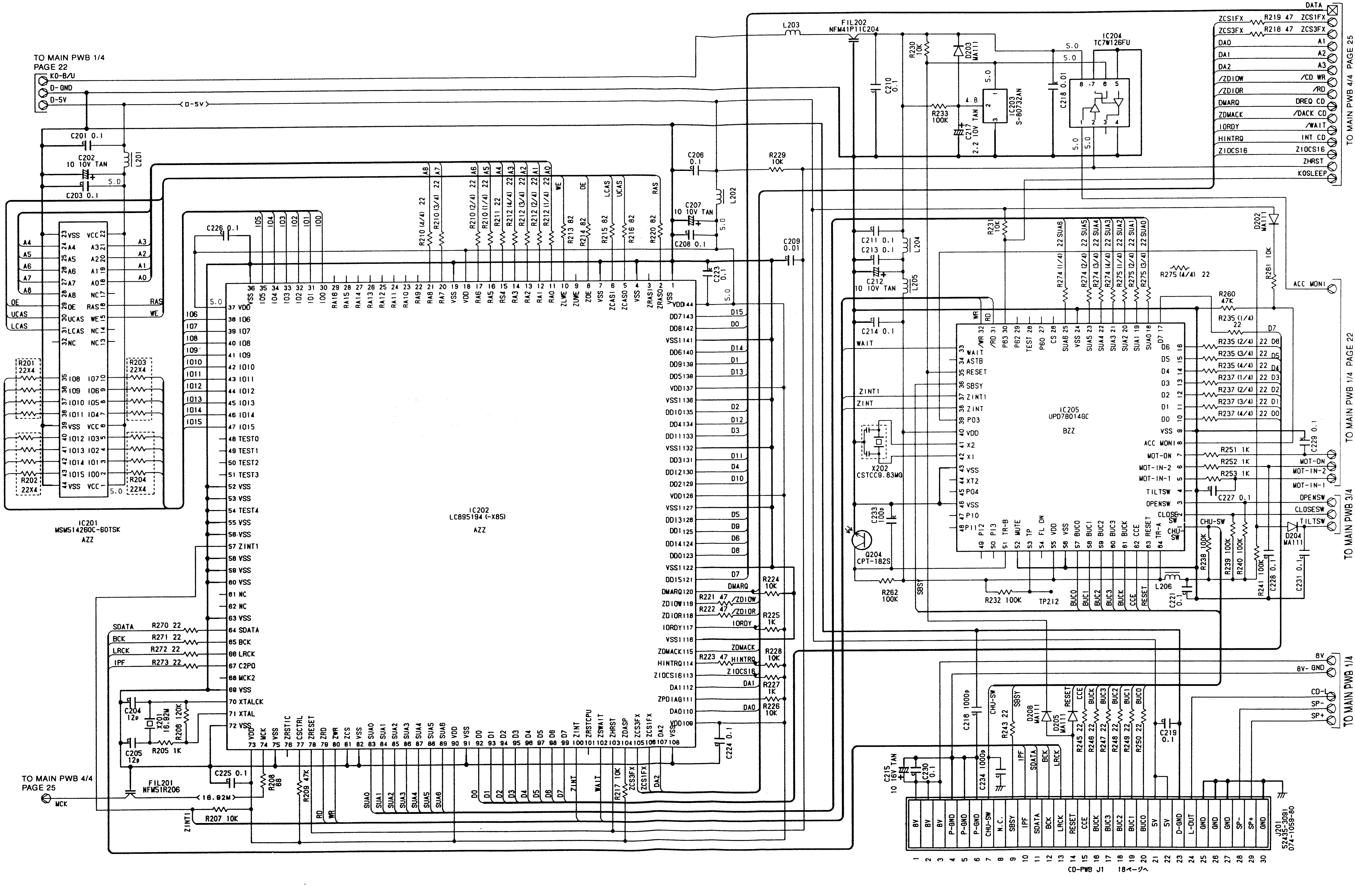
BEEP	
VOL1	L
VOL2	L

BEEP/AUDIO	
BEEP	H
AUDIO	L

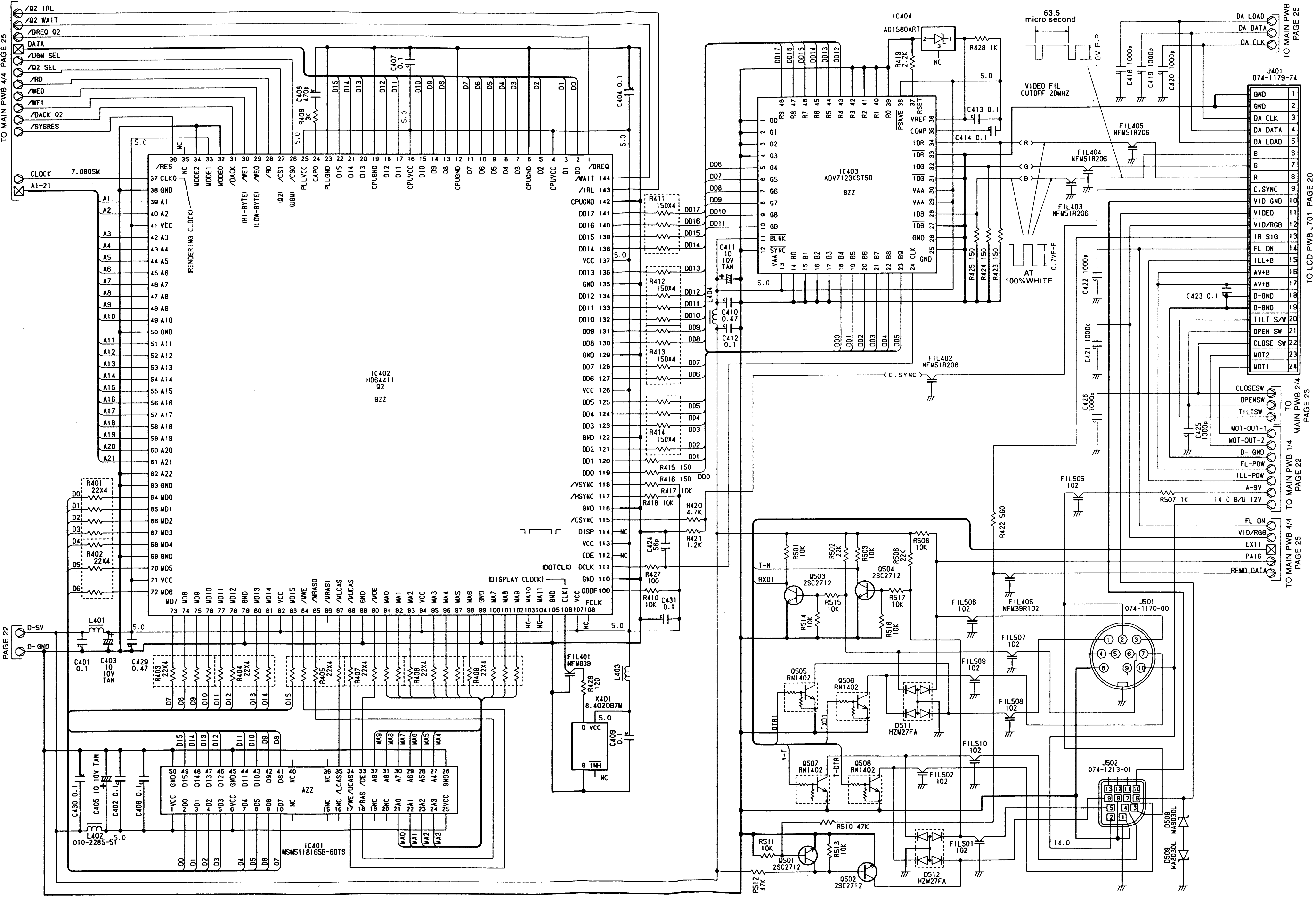
AMP-MUTE	
MUTE-ON	L
MUTE-OFF	H

VOL	VOL1	VOL2
L	L	L
M	H	L
S	H	H

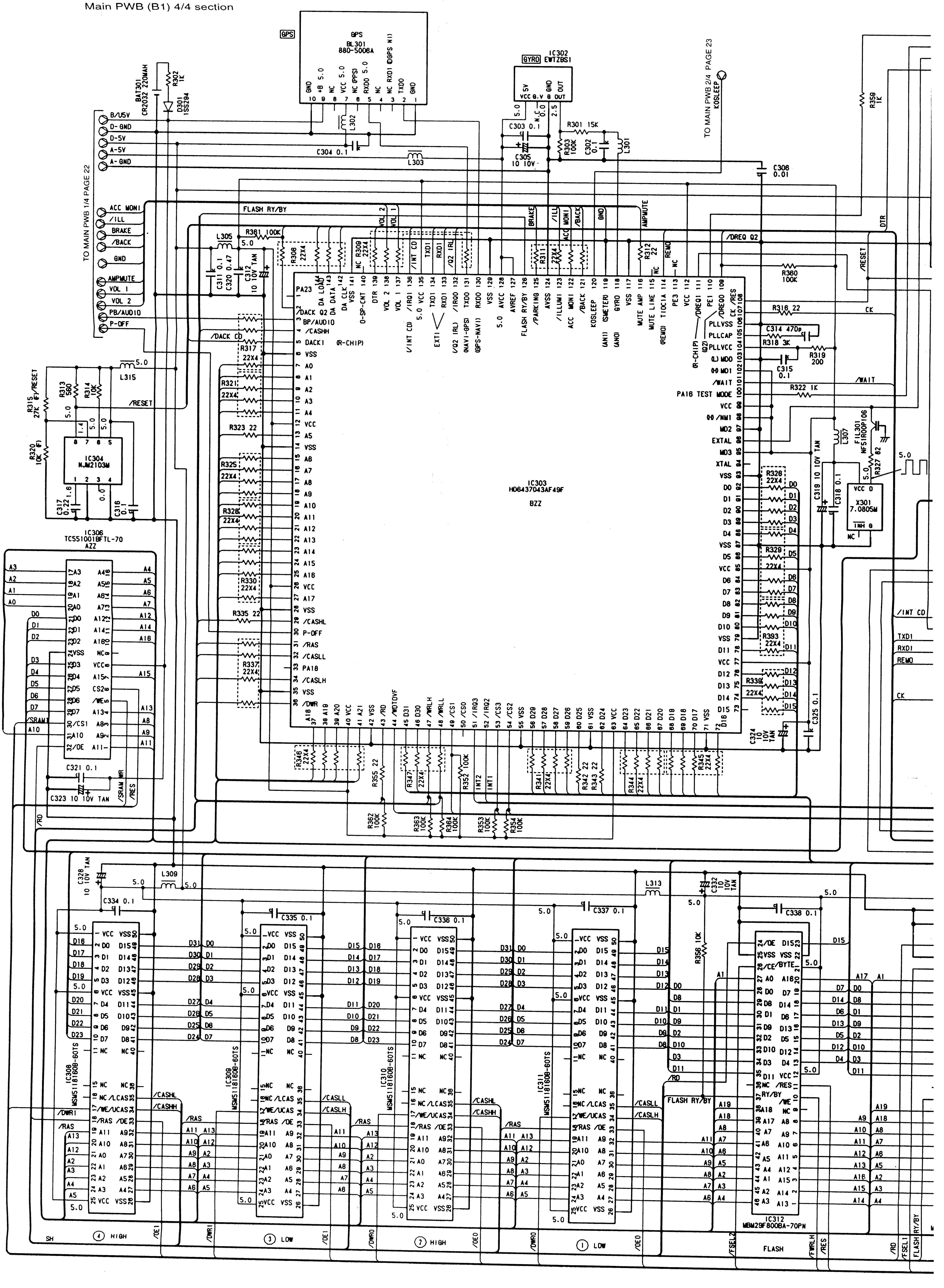
Main PWB (B1) 2/4 section

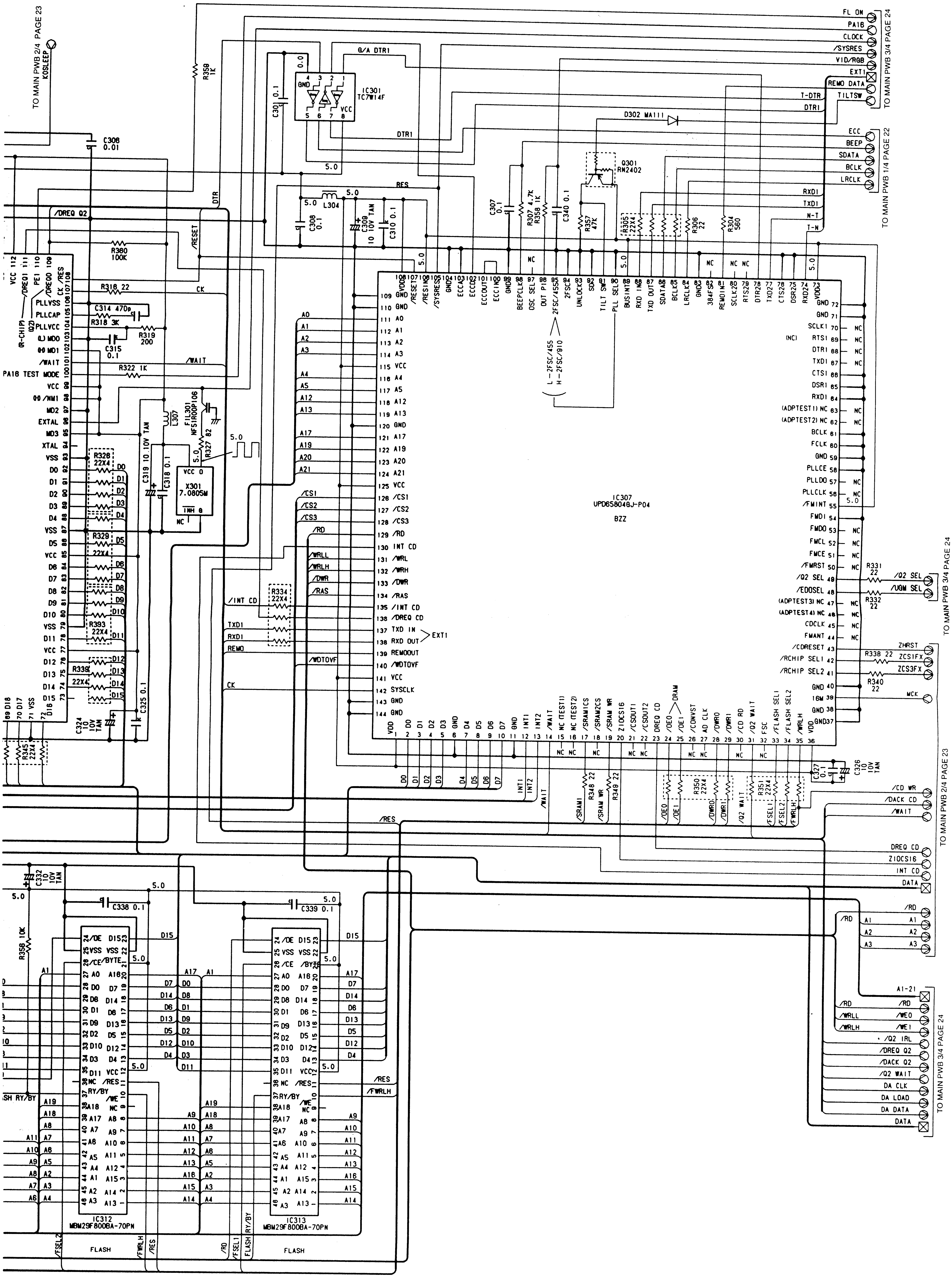

TO MAIN PWB 1/4
PAGE 22
KD-B/U
D-GND
D-5V
C201 0.1
C202 10 10V TAN
C203 0.1
L201
IC201
MSM514260C-60TSK
AZZ
R201 22X4
R202 22X4
R203 22X4
R204 22X4
IC202
LC895194 (-X85)
AZZ
C226 0.1
C206 0.1
C207 10 10V TAN
C208 0.1
C209 0.01
C223 0.1
C224 0.1
C225 0.1
R229 10K
L202
L203
FIL202
NFM41P11C204
C210 0.1
R230 10K
D203 MA111
R233 100K
C217 2.2 10V TAN
IC203
S-80732AN
C218 0.01
IC204
TC7W126FU
IC205
UPD78014GC
BZZ
X202
CSTCC9.83MG
Q204
CPT-182S
C233 100p
C211 0.1
C213 0.1
C212 10 10V TAN
C214 0.1
L204
L205
R231 10K
D202 MA111
R261 10K
R260 47K
ACC MON1
R251 1K
R252 1K
R253 1K
C227 0.1
C229 0.1
D204 MA111
C228 0.1
C231 0.1
R238 100K
R239 100K
R240 100K
R241 100K
L206
C221 0.1
R232 100K
TP212
R262 100K
R224 10K
R225 1K
R226 10K
R227 1K
R228 10K
R221 47
R222 47
R223 47
SDATA
BCK
LRCK
IPF
R270 22
R271 22
R272 22
R273 22
C204 12p
C205 12p
X201 16.92M
R208 120K
R205 1K
R208 68
R209 47K
R207 10K
R217 10K
TO MAIN PWB 4/4
PAGE 25
FIL201
NFM51R206
MCK
16.92M
DATA
ZCS1FX
ZCS3FX
R219 47
R218 47
DA0
DA1
DA2
/ZDIOW
/ZDIOR
DMARQ
ZDMACK
IORDY
HINTRQ
Z10CS16
A1
A2
A3
/CD WR
/RD
DREQ CD
/DACK CD
/WAIT
INT CD
ZHRST
KOSLEEP
TO MAIN PWB 4/4 PAGE 25
TO MAIN PWB 1/4 PAGE 22
MOT-ON
MOT-IN-2
MOT-IN-1
OPENSW
CLOSESW
TILTSW
TO MAIN PWB 3/4
PAGE 24
8V
8V-GND
CD-L
SP-
SP+
TO MAIN PWB 1/4
PAGE 22
C216 1000p
C215 10 16V TAN
C230 0.1
C234 1000p
R243 22
D208 MA111
D205 MA111
R245 22
R246 22
R247 22
R248 22
R249 22
R250 22
C219 0.1
J201
52435-3091
074-1059-80
CD-PWB J1 18ページへ

Main PWB (B1) 3/4 section


TO MAIN PWB 4/4 PAGE 25
/Q2 IRL
/Q2 WAIT
/DREQ Q2
DATA
/UGM SEL
/Q2 SEL
/RD
/WE0
/WE1
/DACK Q2
/SYSRES
CLOCK
7.080SM
A1-21
IC402
HD64411
Q2
BZZ
(RENDERING CLOCK)
(HI-BYTE)
(LOW-BYTE)
(DISPLAY CLOCK)
(DOTCLK)
R401 22X4
R402 22X4
R403 22X4
R404 22X4
R405 22X4
R407 22X4
R408 22X4
R409 22X4
R411 150X4
R412 150X4
R413 150X4
R414 150X4
R415 150
R416 150
R417 10K
R418 10K
R420 4.7K
R421 1.2K
R427 100
R410 10K
C431 0.1
C424 56p
C407 0.1
C408 470p
R406 3K
C404 0.1
TO MAIN PWB 1/4 PAGE 22
D-5V
D-GND
L401
C401 0.1
C403 10 10V TAN
C429 0.47
FIL401 NFM839
R428 120
X401 8.402097M
L403
C409 0.1
IC401
MSM51181658-60TS
AZZ
C430 0.1
C405 10 10V TAN
C402 0.1
C406 0.1
L402
010-2285-51
IC404
AD1580ART
R419 2.2K
R428 1K
NC
5.0
IC403
ADV7123KST50
BZZ
C413 0.1
C414 0.1
C411 10 10V TAN
L404
C410 0.47
C412 0.1
R425 150
R424 150
R423 150
AT 100%WHITE
0.7VP-P
63.5 micro second
1.0V P-P
VIDEO FIL CUTOFF 20MHZ
FIL405 NFM51R206
FIL404 NFM51R206
FIL403 NFM51R206
FIL402 NFM51R206
C.SYNC
C418 1000p
C419 1000p
C420 1000p
C422 1000p
C421 1000p
C426 1000p
C425 1000p
C423 0.1
DA LOAD
DA DATA
DA CLK
TO MAIN PWB 4/4 PAGE 25
J401
074-1179-74
GND 1
GND 2
DA CLK 3
DA DATA 4
DA LOAD 5
B 6
G 7
R 8
C.SYNC 9
VID GND 10
VIDEO 11
VID/RGB 12
IR SIG 13
FL ON 14
ILL+B 15
AV+B 16
AV+B 17
D-GND 18
D-GND 19
TILT S/W 20
OPEN SW 21
CLOSE SW 22
MOT2 23
MOT1 24
TO LCD PWB J701 PAGE 20
CLOSESW
OPENSW
TILTSW
MOT-OUT-1
MOT-OUT-2
D- GND
TO MAIN PWB 2/4 PAGE 23
FL-POW
ILL-POW
A-9V
14.0 B/U 12V
TO MAIN PWB 1/4 PAGE 22
FIL505 102
R507 1K
R422 560
FL ON
VID/RGB
EXT1
PA16
REMO DATA
TO MAIN PWB 4/4 PAGE 25
R501 10K
R502 22K
R503 10K
R506 22K
R508 10K
Q503 2SC2712
Q504 2SC2712
R515 10K
R517 10K
R514 10K
R516 10K
T-N
RXD1
FIL506 102
FIL406 NFM39R102
J501
074-1170-00
FIL507 102
FIL509 102
FIL508 102
Q505 RN1402
Q506 RN1402
D511 HZM27FA
DTR1
TXD1
N-T
T-DTR
Q507 RN1402
Q508 RN1402
FIL502 102
FIL510 102
J502
074-1213-01
D508 MA8030L
D509 MA8030L
14.0
R510 47K
R511 10K
R513 10K
Q501 2SC2712
Q502 2SC2712
R512 47K
FIL501 102
D512 HZM27FA

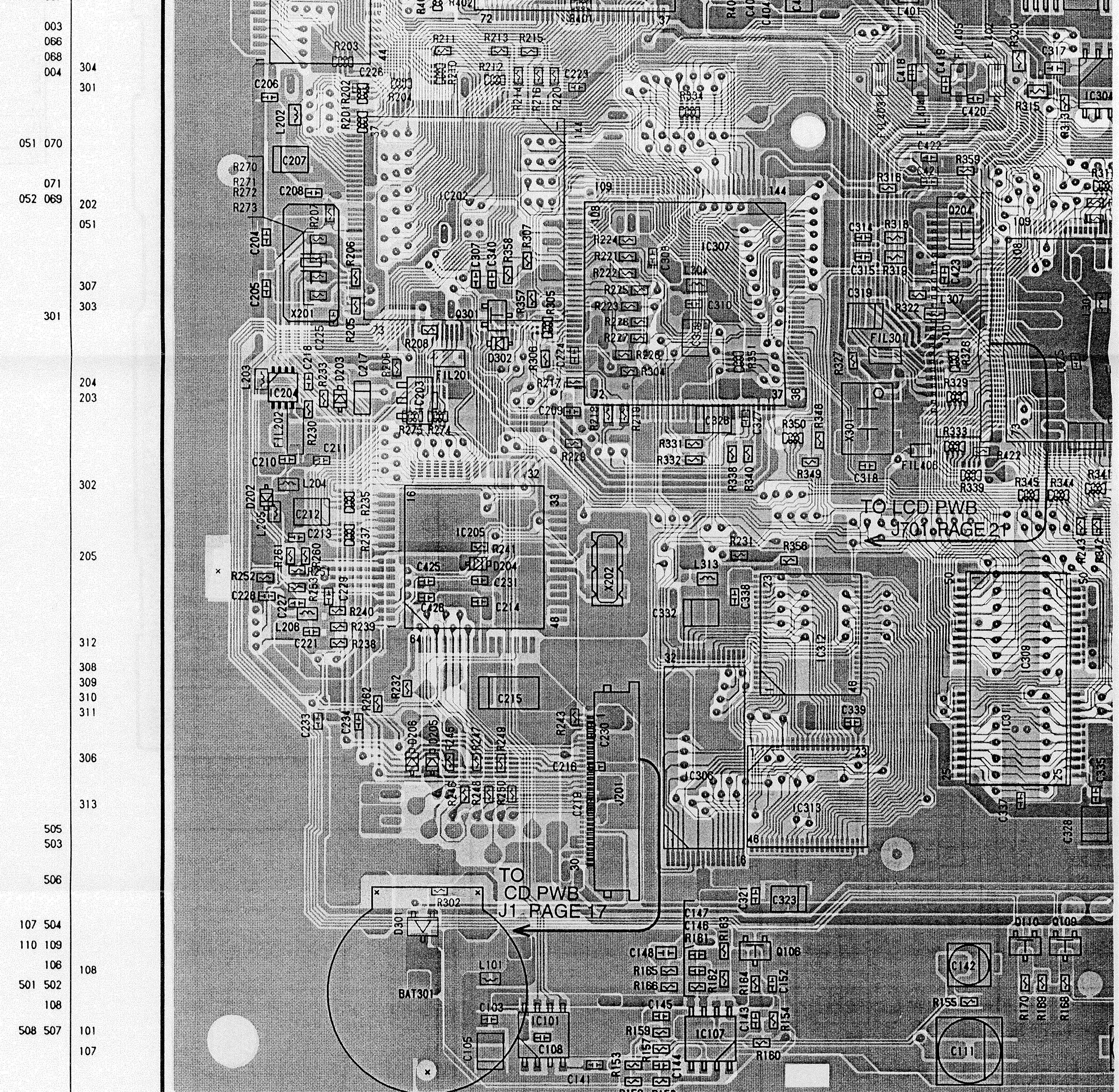
Main PWB (B1) 4/4 section

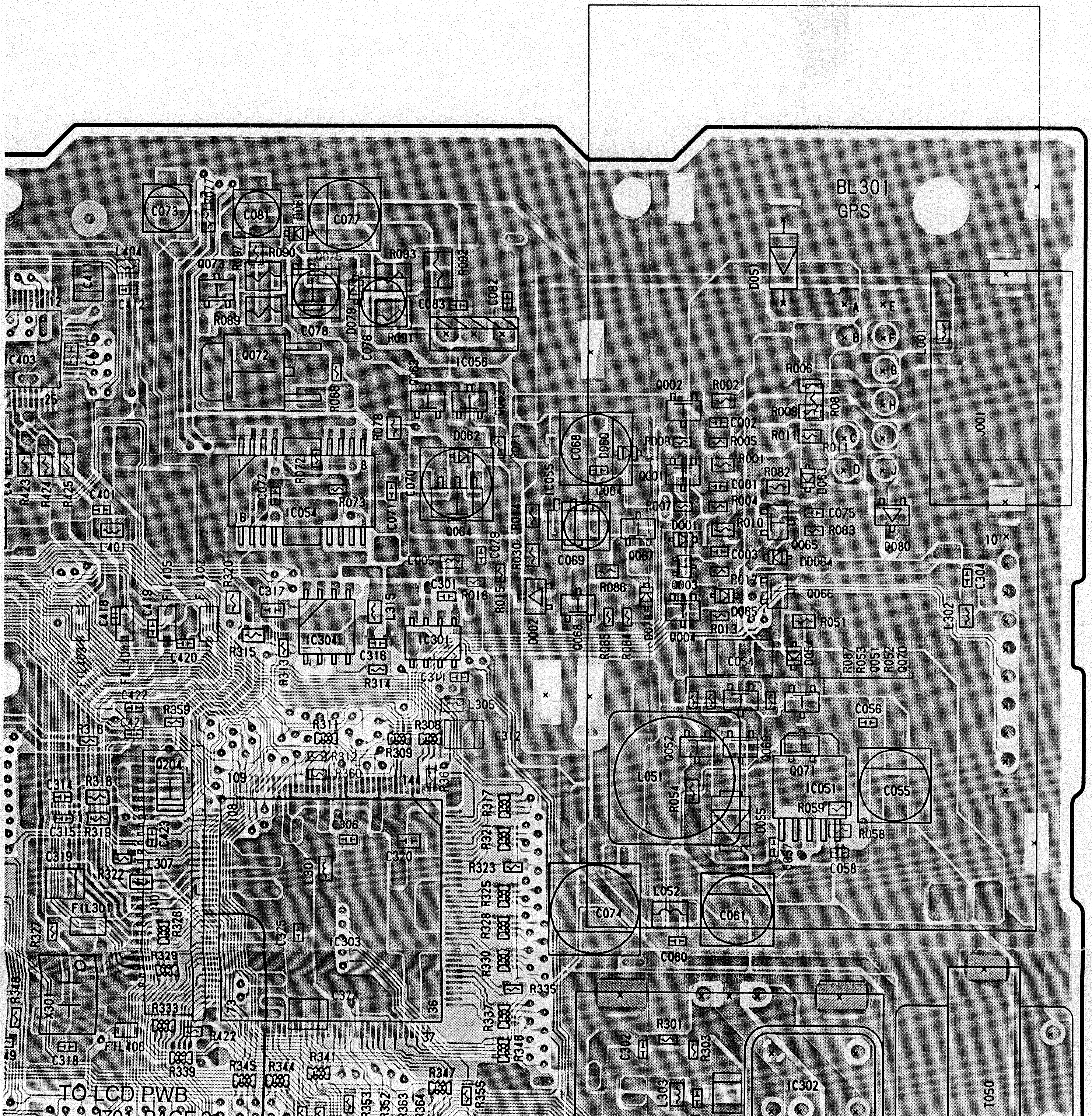

GPS
BL301
880-5008A
GYRO
IC302
EWTZBS1
TO MAIN PWB 2/4 PAGE 23
KOSLEEP
TO MAIN PWB 1/4 PAGE 22
BAT301
CR2032 220MAH
R302 1K
D301 1SS294
B/U5V
D-GND
D-5V
A-5V
A-GND
ACC MONI
/ILL
BRAKE
/BACK
GND
AMPMUTE
VOL 1
VOL 2
PB/AUDIO
P-OFF
FLASH RY/BY
L302
C304 0.1
L303
C303 0.1
C305 10 10V
R301 15K
R303 100K
C302 0.1
L301
C306 0.01
R359 1K
L305
R361 100K
C311 0.1
C320 0.47
C312 10 10V TAN
R308 22X4
R309 22X4
R311 22X4
R312 22
R360 100K
R318 22
C314 470p
R319 200
C315 0.1
R322 1K
L307
FIL301 NFS1R00P106
R327 82
X301 7.0805M
C318 10 10V TAN
C318 0.1
C325 0.1
C324 10 10V TAN
IC303
HD6437043AF49F
BZZ
/DREQ Q2
/RESET
DTR
CK
/WAIT
/INT CD
TXD1
RXD1
REMO
L315
R313 560
R314 10K
R315 27K (F)
R320 10K (F)
IC304
NJM2103M
C317 0.22
C316 0.1
IC306
TC551001BFTL-70
AZZ
C321 0.1
C323 10 10V TAN
/SRAM WR
/RES
/RD
R317 22X4
R321 22X4
R323 22
R325 22X4
R328 22X4
R330 22X4
R335 22
R337 22X4
R326 22X4
R329 22X4
R393 22X4
R338 22X4
R346 22X4
R355 22
R347 22X4
R352 100K
R341 22X4
R342 22
R343 22
R344 22X4
R345 22X4
R362 100K
R363 100K
R364 100K
R353 100K
R354 100K
INT2
INT1
C328 10 10V TAN
L309
C334 0.1
C335 0.1
C336 0.1
C337 0.1
C338 0.1
L313
C332 10 10V TAN
R356 10K
IC308 MSM5118160B-60TS
IC309 MSM5118160B-60TS
IC310 MSM5118160B-60TS
IC311 MSM5118160B-60TS
IC312 MBM29F800BA-70PN
④ HIGH
③ LOW
② HIGH
① LOW
FLASH
/OE1
/DWR1
/DWR0
/OE0
/FSEL2
/FWRLH
/RES
/RD
/FSEL1
FLASH RY/BY
/CASHL
/CASHH
/CASLL
/CASLH
/RAS
SH
5.0

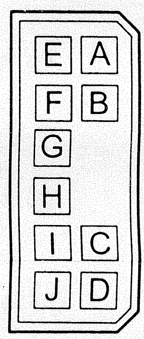

TO MAIN PWB 2/4 PAGE 23
KOSLEEP
R359 1K
C306 0.01
C301 0.1
IC301 TC7W14F
G/A DTR1
DTR1
5.0
RES
L304
C308 0.1
C309 10 10V TAN
C310 0.1
/DREQ Q2
R360 100K
/RESET
DTR
FL ON
PA16
CLOCK
/SYSRES
VID/RGB
EXT1
REMO DATA
TILTSW
T-DTR
DTR1
TO MAIN PWB 3/4 PAGE 24
D302 MA111
ECC
BEEP
SDATA
BCLK
LRCLK
TO MAIN PWB 1/4 PAGE 22
Q301 RN2402
C307 0.1
R307 4.7K
R358 1K
C340 0.1
R357 47K
R305 22X4
R306 22
R304 560
RXD1
TXD1
N-T
T-N
R316 22
C314 470p
R318 3K
R319 200
C315 0.1
R322 1K
PA16 TEST MODE
FIL301 NFS1R00P106
L307
R327 82
X301 7.0805M
C319 10 10V TAN
C318 0.1
R326 22X4
R329 22X4
R393 22X4
R339 22X4
C325 0.1
C324 10 10V TAN
R345 22X4
L-2FSC/455
H-2FSC/810
IC307
UPD65804BJ-P04
BZZ
R334 22X4
/INT CD
TXD1
RXD1
REMO
CK
/WAIT
EXT1
R331 22
/Q2 SEL
/UGM SEL
R332 22
ZHRST
R338 22
ZCS1FX
R340 22
ZCS3FX
MCK
C327 0.1
C326 10 10V TAN
R348 22
R349 22
R350 22X4
R351 22X4
/SRAM1
/SRAM WR
/DEO
/DE1
/DWR0
/DWR1
/Q2 WAIT
/FSEL1
/FSEL2
/FWRLH
/CD WR
/DACK CD
/WAIT
TO MAIN PWB 2/4 PAGE 23
DREQ CD
Z10CS16
INT CD
DATA
/RES
/RD
A1
A2
A3
A1-21
/RD
/WE0
/WE1
/Q2 IRL
/DREQ Q2
/DACK Q2
/Q2 WAIT
DA CLK
DA LOAD
DA DATA
DATA
TO MAIN PWB 3/4 PAGE 24
C332 10 10V TAN
C338 0.1
C339 0.1
R356 10K
IC312
MBM29F800BA-70PN
IC313
MBM29F800BA-70PN
FLASH
FLASH
/FSEL2
/FWRLH
/RES
/RD
/FSEL1
RY/BY
/FWRLH

PRINTED WIRING BOARD

Main PWB (B1) section


Q
IC
073 075
056
403
072
063 062
401
002
404
402
001
201
054
065
055
067
003
066
068
004
304
301
051 070
071
052 069
202
051
307
303
301
204
203
302
205
312
308
309
310
311
306
313
505
503
506
107 504
110 109
106
108
501 502
108
508 507
101
107
TO LCD PWB J701 PAGE 21
TO CD PWB J1 PAGE 17
IC401
IC402
IC403
IC404
IC201
IC202
IC204
IC205
IC307
IC312
IC313
IC101
IC107
IC054
IC304
BAT301
J201
X201
X202
X301


BL301
GPS
J001
J501
J502
T050
IC302
IC303
IC304
IC301
IC309
IC310
IC108
IC051
IC054
IC056
C051
C059
C055
C061
C074
L051
L052
TO LCD PWB
J701 PAGE 21


E
A
F
B
G
H
I
C
J
D

Pin No.	Color	Description
A	YELLOW	BACK UP
B	RED	ACC
C	GREEN	PARKING
D	---	NC
E	BLACK	GND
F	PINK	ECC+
G	---	NC
H	ORG/WHT	ILLUMI
I	PUR/WHT	REVERCE
J	---	NC